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PHILOSOPHICAL FOUNDATIONS IN ANCIENT INDIAN MEDICINE

Science, philosophy, and ethics in Caraka-saṃhitā

by

PRAMOD B. THAKER

submitted in partial fulfillment of the requirement

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ABSTRACT

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PHILOSOPHICAL FOUNDATIONS IN ANCIENT INDIAN MEDICINE

Science, ethics and philosophy in Caraka-saṃhitā

To anyone even marginally interested in the contemporary field of health care, it would not come as a great surprise that for the past few decades the health care system has been in a stage of crisis. To understand the deeper causes of such a crisis, it may help us if we explicate the ethical and philosophical assumptions of a medical system.

In order to determine the nature and possibility of the interrelations of medical science, ethics and philosophy, the ancient Indian medical text, Caraka-saṃhitā, is closely examined.

Indian medical knowledge is known as Āyurveda. This term is made up of two words, āyur and veda, the former meaning 'life' and the latter 'knowledge.' Veda, as a collection of Indian scriptural texts, is perhaps a more familiar word in the West. Caraka was a redactor of a medical treatise known as Caraka-saṃhitā. Most of the scholars place Caraka in the period around 100 A.D.

Caraka considers 'mind,' 'body' and 'spirit' as a tripod supporting the world structure. Caraka clearly defines 'long life' as the goal of medical science. Recognition of 'spirit' and 'mind' as constituents of a 'person' fundamentally influences, not only the etiology of disease and a rationale of treatment, but also medical ethics.

Caraka's approach to seeking a balance within the body and the mind, between an individual and the rest of the world, is born of his philosophical world view. He is most closely aligned with Sāṃkhya, and, to a lesser extent, with Vaiśeṣika schools of Indian philosophy. Caraka's philosophy makes his medicine and ethics 'holistic' in a most radical sense.

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I thank the Graduate Committee of Boston College comprising of Professors Oliva Blanchette, Patrick Byrne, John Cleary and Michael J. Connolly for arranging the syllabus for my study. I also thank Prof. Richard Cobb-Stevens, Prof. Arthur R. Madigan, S.J., and Assoc. Dean Prof. Patricia De Leeuw for their encouragement during this study.

It was sometime ago that I had attended a course on medical ethics taught by Professor Oliva Blanchette. During my class work and subsequent numerous discussions with Professor Blanchette I came to realize that science and ethics should be, and are, intimately related. I am deeply grateful to Professor Blanchette for his insight, guidance and encouragement without which this investigation would not have commenced or completed.

This study involved critical examination of an ancient Indian text in the Sanskrit language. This would have been an impossible task but for the erudite guidance of Professor Michael J. Connolly. It was the detailed examination of Caraka-Saṃhitā, under close supervision of Prof. Connolly, that produced a 'holistic' architecture connecting science, philosophy, and ethics. For this, I am greatly indebted to Professor Connolly. Of course, final responsibility for any omission and commission in the translation and interpretation of the text is mine.

I am grateful to all the scholars whose writings have helped me to understand Indian philosophy and medicine: Surendranath Dasgupta, Gerald James Larson, Karl H. Potter, Sarvapalli Radhakrishnan, J. N. Mohanty, P. T. Raju, Bimal Krishna Matilal and others whose debt is acknowledged in the footnotes. I have followed the Sanskrit text of Caraka-Saṃhitā edited by Ram Karan Sharma and Bhagwan Dash.

I thank Peggy Bakalo, Rosemarie De Leo and Louise Dietenhafer of Dept. of Philosophy for their help over the years. I acknowledge Mrs. Marjorie Peloquine, of Secretarial Services, for her proofreading and correction of the manuscript. Last but not the least, I gratefully acknowledge the support and affection I have received from Sonal, Sejal, Purnima, and Ashok Thaker. It is this support, more than anything else, that has sustained me during this long journey.

Preface

The aim of this investigation is to understand the nature of philosophical presuppositions underlying medical science. For this purpose, the ancient Indian medical science as given in Caraka-Saṃhitā is examined critically. Under the guidance of Professor Michael J. Connolly the Sanskrit text was analyzed in order to retrieve the meaning of different terms as close to (Caraka's) original intent as possible without injecting 'modern' notions into an ancient text. By understanding the detailed structure of Caraka's explanations of diseases and their treatment, we hope to elucidate the intimate relationship between medicine and philosophy. We hope that explication of 'medicine' illuminates its connection to philosophy.

In Caraka, there is a 'holistic' refrain: interconnectedness of diseases of the mind and the body, of diseases resulting from outside causes (āgantu) or innate causes (nija), of actions done in one's current life and those done in past lives. It is true that the presence of a philosophical outlook in some of the discussions in Caraka has been commented upon by several scholars in the past.

However, our purpose and effort is somewhat different. We have tried to explore the nature of 'illness' and tried to understand if the structure of 'illness' according to Caraka connects it to any of the schools of Indian philosophy.

We find clues for these in presence of rajas and tamas as doṣas of mind. Since mind and body as well as accidental and innate diseases are all intimately related to one another in any schema of this science, we have to take rajas and tamas into account in any coherent--āyurvedic--explanation of health and disease.

The school that presents sattva, rajas, and tamas as its central concepts is Sāṃkhya. Thus, it is proposed not only that there is a relationship between Sāmkhya and āyurveda (that it is), but, more importantly, that such a relation is *necessarily* so. In other words, if we remove the philosophical presuppositions or 'world-view' the whole structure of medical science as describe by Caraka will unravel.

The case for such a relation between a particular philosophy and ethics may appear to be weaker and more tentative than the connection between philosophy and medicine. Though it is true that moral injunctions given by Caraka can be shown to be consistent

with any number of ancient Indian 'codes of ethics,' perhaps with the exception of Cārvākas, it is also true that such injunctions cannot be divorced from Caraka without disrupting the therapeutic regimen.

But there is a deeper purpose to this investigation. Regardless of the details of a case for demonstrating an intimate connection between a particular philosophy and medicine, the aim is to elucidate the inherent relationship between philosophical presuppositions and medical science.

If science views medicine in a 'holistic' fashion, the problems and, more importantly, solutions will be understood as 'holistic.' If, on the other hand, science and society views medicine as an industry and a market commodity, the problems and solutions will be understood as industrial and mercantile in nature.

We hope to understand the interconnections among medicine, philosophy and ethics. With this aim in mind, we will discuss the subject of āyurveda after an introductory chapter. Next, we will review various schools of Indian philosophy. After acquiring some familiarity with Indian philosophy, we will examine two 'core' concepts karma ('action') and the 'Empirical Self' (person) found in this philosophy. As one's status of health or disease can be assumed

to be affected--to whatever degree--by what one does, it is useful to understand what these terms mean in the context of Indian medicine.

The discussion of karma and the 'Empirical Self' will be followed by a detailed analysis of Caraka's understanding of 'illness' and 'disease.' Finally, we will attempt to bring together different strands of concepts and arguments to see if any design emerges of a relationship between philosophy and medicine. Some of the key ślokas are given at the end in 'Appendix.'

Philosophy, if anything, teaches us to clarify the nature of problems that we face. This investigation is a modest attempt in this direction. Much remains to be done.

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(1)

Introduction

To anyone even marginally interested in the field of health care, it would not come as a surprise that for the past few decades the health care system has been passing through a stage of crisis. There has always been debate regarding medicine during the recorded history of this field, whether it is about what 'medicine' is or how to practice it.[1] Physicians have been both revered and reviled throughout the ages. They have been considered on a par with priests, and at times religious clerics were the only physicians.[2] The Greeks had their priests acting as healers using incantations and prayers.[3] Later on in Europe, various religious orders erected hospitals and provided care for the sick.

On the other hand, there have been various accounts about physicians which were less than flattering. Some of these accounts were historical, while some were literary creations.

For example, Molière, through a character in his play Le Malade Imaginaire, has said, "Nearly all men die of their remedies,

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[1] Cohen, Revolution in Science, pp. 176 - 194.
[2] Cartwright, Disease and History, pp. 19 - 28.
[3] Edelstein, Ancient Medicine, pp. 205 - 246.

and not of their illnesses."[4] Another playwright, George Bernard Shaw, in the preface to his play The Doctor's Dilemma, writes:

> It is not the fault of our doctors that the medical service of the community, as at the present [1906] provided for, is a murderous absurdity. That any sane nation, having observed that you could provide for the supply of bread by giving bakers a pecuniary interest in baking for you, should go on to give a surgeon a pecuniary interest in cutting off your leg, is enough to make one despair of political humanity. . . what they [doctors] commonly mistake for these [i.e., honor and conscience] is sentimentality and an intense dread of doing anything that everybody else does not do, or omitting to do anything that everybody else does. This of course does amount to a sort of working or rule-of-thumb conscience; but it means that you will do anything, good or bad, provided you get enough people to keep you in countenance by doing it also.[5]

Not for nothing was Shaw known for his biting wit and polemics. He focused on, among other factors, the financial interest of the doctors and the effect it can have on the role played by

[4] Molière, Le Malade Imaginaire, act 3, sc. 3.

[5] Shaw, Selected Plays, p. 1.

doctors. But one need not be quite so cynical about medicine. One may recall one of the comments Socrates had made in Republic:

> Socrates: Surely no physician either, in so far as he is a physician, seeks or orders what is advantageous to himself, but to his patient? For we agreed that the physician in the strict sense of the word is a ruler over bodies and not a moneymaker. Was this not agreed?[6]

Though the financial factors are still important points of the debate in the present decade, there are many more aspects of medical care that are becoming controversial. There are, for example, differences of opinion and controversies about the goal of health care activity. To some, medicine is a science to cure disease. To others, it is an art of caring for people, defying exact monitoring and measurement. For a health care provider in a modern medical center, the goal of medicine could very well fall within a norm as prescribed by the health care establishment. To a native American healer, medicine may mean finding oneself in tune with one's environment. One of the historians has noted: "When a Navaho is sick, feels 'bad all over,' it is because he 'fell out of harmony with the forces of nature'. . ."[7]

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[6] Grube, Plato's Republic p. 16.

[7] Sigerist, A History of Medicine vol. 1, p. 199.

Underlying these differing goals of medicine are the different principles which anchor distinct concepts of medicine which, in turn, govern one's practice. A clinician in a modern hospital operates within the conceptual framework of available medical science on the one hand and within the economic system of the insurance industry on the other.

A healer in a native American tribe may be operating within the framework of traditional knowledge and the economic system of close-knit communal sharing.

The intensity of debate in the field of health care was obvious during the last legislative session of the U. S. Congress in 1994, during which an attempt was made to fashion some kind of universal health care policy. The presidential task force of about five hundred individuals had debated and arrived at a decision to advocate a universal health insurance plan which could not be taken away when one lost or changed one's job. The responses from the public and public representatives were varied. Some supported the aim of universal coverage but without a single payer. Others did not want to tamper with the system at all.[8]

[8] Blumenthal, Health Care Reform - Past and Future N Engl J Med 332: 7, pp. 465 - 468.

Even among the health care personnel there was quite a divergence of opinion. Physicians and insurance organizations of different political persuasions approached and lobbied for diametrically opposite goals. Physicians wanted to make sure that in any new system their economic status and clinical decision-making freedom were assured. The 'marketplace' approach to medical practice was seen by some as threatening the foundation of medical science. One observer wrote, "The future viability of academic medical centers is threatened. . . Our academic medical centers are the envy of the world. But now, powerful market forces that divert money away from direct patient care into business profits imperil their critical missions."[9] Another author also remarked, "Patients may be the only consumers who have to seek permission from someone else in order to obtain services. . . The independence of physicians, as patients' advisers and advocates, is being impaired by business-owned managed-care companies, which may put a higher value on the bottom line than on patients' welfare."[10] Managed-care organizations can present situations where there will be conflicting interests. "Reducing expenditures can limit desirable

[9] Kassirer, Acacemic Medical Centers under Siege N Engl J Med 331:20, pp. 1370 -1371.

[10] Yarmolinsky, Supporting the Patient N Engl J Med, 332: 9, pp. 602 - 603.

services and decrease the quality of life for patients. Strict reliance on protocols can lead to a poorer quality of medicine, particularly in complex or uncertain cases. Increasing efficiency may result in patients' receiving less individual attention."[11] However, some of the policymakers have great faith in the 'free market' system and advocate a strict hands-off approach by the government, letting the market forces decide the outcome.[12]

But relying strictly on market forces aligned with physicians to provide medical care at a reasonable cost may not be a comfortable thought when we come across physicians as advocates of high-tech apparatus in which they have an interest, financial or technical.

For example, Dr. DeVries, who developed the artificial heart costing about $250,000 for the procedure in the first patient, considers himself fortunate that he is able to do research in this field funded by a giant for-profit chain. He hopes that the artificial heart will become a shelf item at a cost of $10,000 in the near future. What he had to say about the ethical problems raised in this enterprise is illuminating:

> As for the ethicists, well, I like them and they often have some very interesting things to say. . . [However] The

[11] Rodwin, Coflicts in Managed Care N Engl J Med 332: 9, p. 604.
[12] Gramm, Medical Savings Accounts N Engl J Med 331: 17 pp. 1158 - 59.

surgeon is in the arena; the ethicists are in the stadium watching the fight. The artificial heart is a whole new world, mobilizing the entire hospital team to tackle a medical problem with economic, moral, and spiritual impact. It's very easy for someone to throw something at you. I can't tell the ethicists how to practice. They have their own bulls to fight - like staying on salary and getting into print and on talk shows. They offer some insight, but often they don't make a lot of sense.[13]

Heart disease is an important health problem to be dealt with, as it is one of the prominent causes of morbidity and mortality in the U. S. A. The physician, if he is technologically proficient, tends to focus on a technological solution to the problem, no matter how expensive it is. Instead of looking at the question of 'heart disease' in its totality--in association with smoking, sedentary life-style, stress, etc.--and attempting to find solutions that will address a complex problem, a technocrat tries to reduce the problem to its 'technical' dimension. The heart is a 'pump' and if it is malfunctioning, the solution is to devise an artificial 'pump.' All the energy and skill of the physician is devoted to developing the

[13] Breo, Surgeon foresees artificial heart as 'shelf item'. Am. Med. News, Sept. 12, pp. 1, 13-16.

artificial 'pump.' Even the heart patients are looked upon as potential 'suitable' candidate for the new device. The problem of heart disease, with which one had commenced the investigation, starts receding in the background and the technical problems of the 'artificial heart' predominate the quest for solution. There is dominance of 'means' over 'ends.'[14]

Insurance companies and health industry giants allegedly are more concerned with cost containment in relation to the profitability of their enterprises. The patient's concern is naturally to obtain the best medical care at a reasonable price. These various concerns are reflected in the debates witnessed not only in medical and technical journals but also in the popular media. When we review the literature of the controversy in health care we are struck by the fact that sometimes the debating parties are talking at cross-purposes. They are almost speaking different languages without understanding or making an attempt at understanding what the opponents are saying.

This may be due to the basic philosophical difference between the two sides in the debate. For example, whether one considers 'health' a 'benefit' or a 'right' makes a crucial difference in the means

[14] Blanchette, Ethical Judgement in Health Care, pp. 77 - 110.

that one would marshal to achieve the goal. If it is a 'benefit' only, then 'health' can be treated as any other commodity and its availability can be entrusted to the market forces. However, if one accepts the premise that 'health' is a 'right,' then society and its instrument, the government, is obligated to do everything that can be done to assure delivery of health care to its citizens. Even the very terms, 'health' and 'health care,' are open to divergent interpretations. One can take 'health' as 'the absence of disease.' In that case, one can treat a particular entity labeled 'disease' and achieve a 'cure' when the patient is free of that entity. How we define 'health' influences the way we approach and limit the field of health care.

This can be seen when we examine the definition of health as given by the World Health Organization:

> The States Parties to this Constitution declare, in conformity with the Charter of the United Nations, that the following principles are basic to the happiness, harmonious relations and security of all people:
>
> Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

> The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.
>
> The health of all people is fundamental to the attainment of peace and security and is dependent upon the fullest co-operation of individuals and States.
>
> The achievement of any State in the promotion and protection of health is of value to all. . .[15]

This definition of health includes, among other things, 'health' as a 'right' of every human being, and the signatory states' responsibility to assure that the commitment is fulfilled. It would not be too difficult to arrive at the identity of the author--an organization of governments--of this document through analysis of the definition within it. An 'organizational' patina of the definition of 'health' is generated from the organization that defines the term.

Even a term like 'medicine' is open to change in its meaning and connotations. What was once understood as 'medical science' is now 'health care' or even 'health industry.' There are other terms in use, such as 'total health care,' 'holistic health care,' 'mainstream

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[15] Beauchamp *et al.* Contemporary Issues in Bioethics p. 48.

health care,' 'alternative health care.' Physicians are being renamed as the 'health care providers' (or more precisely speaking, one of the health care providers, along with nurses, paramedics, etc.). This alters their status, at least in terminology if not entirely in practice. The patients are called 'consumers,' ostensibly to be provided with better service in a consumer-oriented culture.

In addition, the past few decades have witnessed enormous technical advances in the medical field. There have been critics who have questioned whether the improvement in our health in general over the several decades is due to anything that medical science has done. Some critics have even gone so far as to suggest that 'medicine' has been harmful to patients in several ways and teach that patients should be wary of the 'medical establishment.'[16] We are not judging the merit of such a case here. But the mere fact that such a case is made indicates the intensity of the issues in the debate. Even assuming that technological advances have helped to solve some of the therapeutic problems we have, such advances at the same time have raised several troubling questions with technological, economical, and ethical implications.[17]

For example, the artificial heart valves which have been

[16] Illich, Medical Nemesis pp. 5 - 30.

[17] Blanchette, Ethical Judgment in Health Care, pp. 77-119, 377 - 451.

invented have helped to prolong life and alleviate the pain and suffering of patients with heart valve disease. However, certain heart valves--the metallic-plastic ones--can cause blood clots and be harmful to patients. This effect of the artificial heart valve needs to be addressed at a technical level. But even as one is trying to solve the technical problems raised, one has to wrestle with economic questions such as, "How much will such operations cost?" or "Who will pay for these operations?"

Once these questions are raised, we realize that underneath the technical aspects of a procedure lies a human value system, whether this value system is explicit or implicit. This becomes clear when we read what a physician had to say when his wife went through a series of technologically sophisticated tests to diagnose and treat her lung ailment. The husband, a physician, writes: "Five traumatic procedures. And the only results were unnecessary suffering, fear of hospitals and a mountain of bills from 20 providers, human and otherwise. . . By no means am I advocating dismantling of technology. . . It [solution] lies in a balance between clinical skills and technological ingenuity. The fundamental evil resides in the gulf between the scientists and the humanists in our society."[18]

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[18] Gordon, First Person in American Medical News, May 6, 1991, p. 25.

It is being recognized increasingly that certain questions, though they may contain a technical and economic component, can be clarified only when their underlying ethical and philosophical presuppositions are addressed and understood.[19] Let's consider the example of human experimentation. There has been a project of developing a vaccine for HIV-AIDS patients, conceived in Europe and North America. However, the experimentation for this project was started in the African continent. Though it is important to know the means and methods employed in such an experimentation, it is the human experimentation *per se* which commands our attention. The fact that such an experiment was started in Africa and not in Europe or North America, raises some ethical questions.[20] This is not to say that the means and methods employed in such experiments have no bearing on the discussion. Surely they do. The point is that the technical detail is germane only to the extent that it elucidates the ethical nature of such an experiment. An experiment devised on one continent is put into effect on another among a population that may or may not fully understand the nature of 'informed consent.' The brunt of potential risks is borne by a populace which is most ill equipped to calculate the risk-benefit ratio.

[19] Ramsey, The Patient as Person, pp. xvi-xviii.
[20] Saltus, HIV -Vaccine, The Boston Globe, Feb. 21, 1994.

To take another example, let us say that one is trying to ascertain the effect of certain medications on a disease such as syphilis. Such an experiment was conducted in Tuskegee Alabama, in the early part of this century.[21] Like any scientifically valid experiment, this one also had two groups of patients, one receiving currently available treatment for syphilis and the other receiving only a placebo. On the surface this has all the appearance of a technically well-designed experiment. When we examine the detail, however, we become aware of the inherent problems associated with this project. The two groups of patients receiving two different types of treatment were not part of the same experiment. The selective group of patients who were receiving placebo were compared with other patients at large who received the usual treatment available at the time. The group of patients receiving placebos were black citizens exclusively. Further, they were not aware that they were not receiving any useful medication. As one writer points out, "The Tuskegee study had nothing to do with treatment. . . It was a nontherapeutic experiment, aimed at compiling data on the effects of the spontaneous evolution of syphilis on black males. . . The immorality of the experiment was inherent in its premise."[22]

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[21] Jones, Bad Blood.

[22] Jones, op. cit. pp. 2 - 9.

Receiving a placebo is acceptable in a clinical trial as long as the participants participate in the trial knowingly and voluntarily. This is referred to as 'informed consent.' A proper understanding of 'informed consent' can protect the patients who otherwise would be quite vulnerable. The African-American patients who received placebo were never told that they were participating in any 'experiment.' They were under the impression that they were receiving 'medicine' for their disease. They did not derive any benefit from the placebo and were definitely harmed as the known effective treatment was withheld from them - that too without their knowledge and consent.

In another experiment a few decades ago, some researchers gave small doses of radioactive material in the food to some mentally retarded institutionalized children. These children or their guardians were never informed of any danger that may have been involved in feeding radioactive material to them.[23] No matter how useful or technically sophisticated an experiment, it should be the ethical principles which provide a warrant for the method and means used, and not just the technical correctness of the experiment.

[23] Allen, Radioactive Food Experiment The Boston Globe, Dec. 26, 1993.

Once we realize that ethical principles have a central role to play in the medical field, we start paying close attention to them. Ethics informs us of the way we ought or ought not to behave or do certain things. Ethics itself is based on certain philosophical assumptions or world views. For example, someone may take a position that a given religious text is literally true in every respect. In that case, all the actions of such a person will be influenced by this assumption. This is one of the reasons why Jehovah's Witnesses would not accept a blood transfusion or a Christian Scientist would not accept medical treatment. The point is not whether a belief system of a particular sect or denomination does or does not provide a valid guide towards ethical decisions. However, to rely exclusively on technological correctness as being sufficient for making an ethical decision tends to exclude any other kind of argument in the decision process. Technology is a jealous master; it is quite reluctant to share its power. Everything that is feasible technologically is interpreted as being permissible ethically.

Such being the case, it is incumbent upon anyone interested in the current debate in the field of medicine to examine the philosophical assumptions or world view underlying the theory and practice of medicine. A review of medicine tells us of the changes

that have taken place over the millennia regarding the ethics of medical practice. An examination of the Hippocratic Oath and the American Medical Association's Principles of Medical Ethics reveals some of the changes that have taken place in basic assumptions that underlie medical care.

The Hippocratic Oath is as follows:

> I swear by Apollo, the Physician, and Asclepius and Hygieia and Panaceia and all the gods and goddesses, making them my witnesses, that I will fulfill according to my ability and judgment this oath and this covenant:
>
> To hold him who has taught me this art as equal to my parents and to live my life in partnership with him. . .
>
> I will neither give a deadly drug to anybody if asked for it, nor will I make a suggestion to this effect. Similarly I will not give to a woman an abortive remedy. In purity and holiness I will guard my life and my art. . .
>
> What I may see or hear in the course of the treatment or even outside of the treatment in regard to the life of men, which on no account one must spread abroad, I will keep to myself holding such things shameful to be spoken about.
>
> If I fulfill this oath and do not violate it, may it be granted

to me to enjoy life and art, being honored with fame among all men for all time to come; if I transgress it and swear falsely, may the opposite of all this be my lot.[24]

We notice that the Hippocratic Oath opens with an invocation and allegiance to the gods. This reflects the prevailing view of a world influenced, if not governed, by gods. There is a clear injunction against physicians assisting 'suicide' and 'abortion.' Among the Greek philosophers the Pythagoreans had a strict code of 'secrecy' and 'non-harming' to any living entity. They also believed that life begins at conception. The ethical prescriptions of the Hippocratic oath are most likely to have been influenced by the Pythagorean philosophers.

A. M. A. Principles of Medical Ethics are as follows:

PREAMBLE

. . .

The following Principles adopted by the American Medical Association are not laws, but standards of conduct which define the essentials of honorable behavior for the physician.

PRINCIPLES

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[24] Edelstein, op. cit., pp. 3 - 5.

I. A physician shall be dedicated to providing competent medical service with compassion and respect for human dignity.

II. A physician shall deal honestly with patients and colleagues, and strive to expose those physicians deficient in character or competence, or who engage in fraud or deception.

III. A physician shall respect the law and also recognize a responsibility to seek changes in those requirements which are contrary to the best interests of the patients. . . [25]

One of the ways to obtain insight into the present ethical predicaments facing medicine is to contrast them with similar issues raised in the past. This may help us to see how the thinkers of those times dealt with these issues. There is no mention of gods in the A.M.A. Code, in contrast to the Hippocratic Oath. Instead it talks about obeying and working within *the law,* which comes from a view of a society governed by laws and not gods. The A.M.A. Code of Conduct is a set of rules arrived at by a professional organization in a country with a written Constitution and a tradition of democratic government.

[25] Beachamp et. al., op. cit., p. 122.

Male dominance is another point of contrast. It is a commonly accepted posture of Greek society. But in modern society such an overt stance is no longer evident when we contrast the two codes. Further, it is Edelstein's thesis that Pythagorean philosophy influenced the framers of the Hippocratic Oath. For example, in the prohibition against giving any deadly drug to anyone or assisting in abortion, Edelstein sees a a close connection between the Oath and the Pythagorean doctrine. He writes:

> Pythagoreanism, then, remains the only philosophical dogma that can possibly account for the attitude advocated in the Hippocratic Oath. For indeed among all Greek thinkers the Pythagoreans alone outlawed suicide and did so without qualification... [As for abortion] Aristotle advocates that abortion should be performed before the foetus has attained animal life; after that time he no longer considers abortion compatible with holiness. But such a restriction is based on the biological notion that the embryo from a certain time on partakes in animal life. . . It was different with the Pythagoreans. They held that the embryo was an animate being from the moment of conception."[26]

[26] Edelstein, Ancient Medicine, pp. 17-19.

The A.M.A. Code does not mention the--now controverted--issues of assisted suicide and abortion. But that does not mean they are not present, though hidden, in that document. When the Code mentions working 'within the law,' it implies the medical community's assent to a current legal norm regarding assisted suicide and abortion. To be fair to the writers of the Code, one has to say that now, as compared to the Greek period, there are many more ethically relevant issues than can be accommodated in a single brief code of conduct. However, the point is that whereas the Hippocratic Oath was influenced by a contemporaneous (Pythagorean) doctrine, the A. M. A. Code is guided by a legalistic, representative form of governance which hardly seems to transcend technical correctness.

Not only is ethics--the way medicine is practiced--based on underlying philosophical assumptions, but science itself ultimately depends upon the implicit world view of the scientist, individually or as part of a community. If we accept Kuhn's explanation of a scientist working within a paradigm, then we can understand how a particular tacit acceptance of a world view shapes what the scientist believes and does.[27] Leaving aside the formulation of a paradigm as proposed by Kuhn, in a case where any scientist is charting a new

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[27] Kuhn, The Structure of Scientific Revolution, pp. 111 - 135.

course, the scientist's own philosophical assumptions would frame his understanding and practice of science and the way he practices it.

In 1625 William Harvey published his book De Motu Cordis, which was read by Descartes in 1632.[28] Descartes, in his Discourse on Method and also in his Description of the Human Body, praised Harvey for making the discovery of the circular motion of blood.[29] But, Descartes disagrees with Harvey on the precise mechanism by which the circulation of blood takes place for reasons that betray the influence of philosophical presuppositions on scientific conclusions.

Harvey, who had studied in Padua, had learned that arteries, in spite of what their name implied, carried blood and not merely air. He had also learned about the theory of pulmonary circulation and the unidirectional valves in peripheral veins. The significance of both of these findings, which was missed by their original discoverers, was realized by Harvey during his research. Harvey conducted animal experiments for about nine years. He studied the action of the heart in cold-blooded animals as well as in dying hearts, in sort of a study in slow-motion. These experiments clarified important aspects of the systole and diastole--contraction and

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[28] Cottingham et al, The Philosophical Writings of Descartes, Vol. I, p. 136.
[29] Cottingham et al, The Philosophical Writings of Descartes Vol. I, pp. 316 -318.

relaxation--of the heart. The unidirectional nature of the blood-flow in the veins observed by his teachers at Padua was reconfirmed by Harvey. The fact that in the veins, the blood can flow towards the heart but not away from it; the absence of pores between the right and left side of the heart; the presence of pulmonary circulation; the amount of blood leaving the left side; and the amount of blood returning to the right side: all these facts led Harvey to the inescapable conclusion that blood coming out of the left side must return to the right side.[30] Of course, at that time neither what causes a heart to beat--what we can now call a pacemaker-- nor capillary circulation was known.

Though Descartes accepted the circulation of blood as described by Harvey, he disagreed with Harvey about the mechanism of circulation. In the Cartesian scheme of things, the heart acted as a central hearth, a source of heat, and the blood was expelled by the heart not acting as a pump, but blood was heated up and expelled in a heated form to the lungs. Descartes said, "It is also this [heat] which gives its motion to the blood, and causes it to flow ceaselessly and very quickly in all the arteries and veins, whereby it carries the heat which it acquires in the heart to every part of the body, and

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[30] Harvey (Tr. Franklin), Movement of the Heart and Blood in Animals pp. 44 - 67.

supplies them with nourishment."[31] For Descartes, there were two kinds of 'things' in the world, the 'thinking thing' (*res cogitans*) and the 'extended thing' (*res extensa*). Besides the soul or mind, which was the 'thinking thing,' the whole of the material world was the 'extended thing.' Descartes stated, "The nature of matter or of body in its universal aspect does not consist in its being hard, or heavy, or colored, or one that affects our senses in some other way, but solely in the fact that it is a substance extended in length, breadth and depth."[32] All material phenomena, including the heat in the heart, had to be understood as a result of the motion of particles, in this case a very rapid movement.

For Descartes, the motion/heat of the 'extended thing'--an integral part of his philosophical system--made sense in explaining the circulation of blood. Harvey was trying to find an explanation for the available data he had collected during his experiments. Underlying Descartes' refusal to accept Harvey's description of the mechanism of circulation was the entire Cartesian philosophical system which made it difficult, if not impossible, for Descartes to accept the heart as a pumping apparatus. Descartes' 'medical science'

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[31] Descartes (Tr. Haldane & Ross), The Philosophical Works of Descartes: The Passions of the Soul, v. 1. pp. 334-335.

[32] Descartes, (Tr. Haldane & Ross) The Philosophical Works of Descartes: Principle of Philosophy, v. 1. pp. 255-257.

can be fully understood only in light of his 'philosophy' and *vice versa* .[33] We, who are heirs of Cartesian and Harveyan science, can see that Harvey was correct and Descartes was wrong regarding the theory of circulation. But the example of the differences between the Cartesian and Harveyan interpretations about the circulation of blood should make us cautious about our attachment to one or the other current medical theory. As Santayana has said, "Those who cannot remember the past are condemned to repeat it."[34] Comparisons between the Hippocratic Oath and the A.M.A. Code, and between Descartes and Harvey, should make us more cautious in the interpretation of our practice of science.

The above-mentioned instances are part of a history which we can call the Greek, Judeo-Christian, Renaissance tradition, with one or more different elements predominant in them at different times. A question arises: If the examination of different examples from within a philosophical tradition is helpful in our understanding of health care practice, would the investigation of a different philosophical tradition yield any more such useful benefit?

Obviously, here we have taken the answer to be in the affirmative. Otherwise, we would not have considered this

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[33] Carter, Descartes' Medical Philosophy pp. 20 - 65.

[34] Santayana, in Aphorisms (Ed. Auden & Kronenberger), p. 239.

enterprise to be worthwhile.

Without offering a detailed apology for such an undertaking, we can at least present some of the reasons for it in the way that several philosophers have recognized the importance and the advantage of comparisons between one tradition of philosophy with another, as can be seen in the growing literature of comparative philosophy.

Moore writes in the preface to A Source Book in Indian Philosophy:

> Part of the function of this volume is to 'prove' both the substantiality and the wide range of Indian philosophy and also to convince skeptical Westerners that much of Indian philosophy is *philosophy* not only in its unique Indian forms but also in accordance with the strictest standards of open-mindedness, critical analysis, and rational investigation."[35]

Another author reviews the responses of different philosophers toward Indian philosophy as follows:

> An increasing number of Western scholars try to do justice to Indian philosophy by treating it simply as 'philosophy,'

[35] Radhakrishnan and Moore, A Source Book in Indian Philosophy, p. ix

regardless of its cultural and historical origin and context, and dealing with it in terms of truth and validity... Others expect from India alternatives to the Western attitudes and preoccupations. They hope to find human possibilities and dimensions of meaning which are less developed or even absent in the West. They look for synthesis, dialogue, mutual supplementation, even therapy. In this sense, F. S. C. Northrop invokes 'the meeting of East and West.' W. E. Hocking says that 'we need not only two but many eyes,' and he refers to a hierarchy of three historic attitudes towards foreign cultures, specifically the East: 1. 'This is strange and alien - avoid it.' 2. 'This is strange and alien - investigate it.' 3. 'This appears strange and alien - but it is human; it is therefore kindred to me and potentially my own - learn from it.'"[36]

When one studies a system of thought such as ancient Indian medicine represents, there are many ways one can look at it. One of the ways to study an unfamiliar system is to think of it as belonging to a strange and alien culture, more in the vein of a curious 'find' studied by an anthropologist or an archeologist.

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[36] Halbfass, India and Europe, p. 163.

Another approach could be to study such a treatise as some lost and found religious text evoking veneration; this approach would only substantiate beliefs already held by its students.

Our purpose here is somewhat different. In our investigation of ancient Indian medicine called āyurveda, we do not wish to claim that it is *scientific* in the sense of 'modern science.' This does not mean that such a claim cannot be made at least for some of the āyurvedic insights. Filliozat captures a balanced approach when he writes, "Ayurveda need neither be exalted beyond measure nor condemned either for its antiquity or for the failure of those who practice it without prudence. It should be studied as an original system of science and as an exceptional source of medical experience."[37] At the same time, we certainly do not wish to claim any infallibility of the document because of its purported divine origin. Rather, through close reading of the text, our attempt would be to show how a coherent system of 'science'--implying the term as understood by certain peoples and practitioners who employ it--is formed and advanced. Further, we will try to understand how the 'science' of āyurveda is informed by its philosophical precepts.

In addition, we would attempt to investigate how the

[37] Filliozat, The Classical Doctrine of Indian Medicine, p. xv.

philosophical foundation in its turn also impacts the ethical considerations within the system. If such a study of South Asian medicine can help us better understand our own modern medical science, so much the better. Perhaps such an investigation may prompt us to appropriate from an ancient text what is useful for supplementing or for better understanding our current medical theory and practice.

Mehta indicates the usefulness of comparison between Vedānta (one of the six schools of Indian philosophy) and Heidegger as follows:

> If the bringing together of 'Heidegger' and 'Vedānta' is to have any sense it can only lie in enabling us to see that there is more to Vedānta - something that is its very own and yet unfulfilled - than providing those who are in revolt against the establishment (the religious, the Western metaphysical), and in flight from thinking, with a 'mystical' alternative; that as a way or path of thinking, not so much as a doctrine, Vedānta may also have some relevance to that other task to which Heidegger points, the task of planetary thinking, in an age of homelessness and of the coming together of East and West in the extremity of fate, in the

task of overcoming this universal misery of lost home by 'staying on the path, in genuine need, and learning, without straying from the path, even though faltering, the craft (*Handwerk*) of thinking.'[38]

Our hope is that the study of āyurveda will help us stay on the path and provide us with a 'home' where we can learn the craft of thinking more clearly about medicine and care for health.

[38] Mehta (Ed. Graham Parkes,) Heidegger and Vedanta in Heidegger and Asian Thought, in Heidegger & Asian Thought, p. 42.

(2)

Āyurveda

Indian medical knowledge is called āyurveda. This term is made up of two words, āyur and veda, the former meaning 'life' and the latter meaning 'knowledge.' Veda is perhaps a more familiar word in the West. It derives from the verb root 'vid' meaning to know, understand, perceive, learn, become or be acquainted with, be conscious of, have a correct notion of something.[39] Thus, in general, veda means knowledge.

More specifically, it refers to the body of knowledge or understanding contained in ancient Indian texts. In Indian history, initially, we encounter mention of three such texts. Subsequently it has been accepted that there are four texts, i.e., four Vedas. Therefore, depending on where we pick up the historical thread of Indian philosophy, there are three or four such texts or Vedas.[40]

The first and the oldest of these is Ṛgveda. The other three Vedas are Yajurveda, Sāmveda and Atharvaveda. Several of the stanzas in the later Vedas are either identical or dependent on those in the Ṛgveda. Of the other three Vedas, Yajurveda contains ritual

[39] Monier-Williams, A Sanskrit-English Dictionary pp. 963, 1015.
[40] Gonda, Vedic Literature p. 8.

instructions, Sāmveda melodies as sung, and Atharvaveda the magical and curative formulas.

Vedas occupy a unique position in Indian philosophy and civilization for several reasons. First, they are the earliest recorded speculation on the Indian subcontinent. Thus, they provide a glimpse of an era that existed more than three millennia ago. Second, the influence of the Vedas on the subsequent development of Indian philosophy is unmistakable. Not that every school of philosophy in India agreed with what Veda had to say or accepted the authority of Veda. On the contrary, some schools were openly critical and opposed to the Vedic position, for example, Buddhism. But the fact is that, even when a particular school of philosophy was challenging the Vedic tenets, it had to contend with Veda in so far as it had to refute or formulate its opposition with reference to Vedic thought. Some have argued that even commentators who were bold and proposed a new line of thought in philosophy were at great pains to justify their position by attempting to show that it in fact was in conformity with Veda, if it is properly interpreted. It is this overarching presence of Veda that is evoked when the ancient Indian medical knowledge is called āyur-veda.

The period of the composition of Vedas can be estimated only within a margin of error of a few centuries. The Vedas were probably composed between 1400 B.C. and 800 B.C., though there are scholars who assign a date as early as 4000 B.C.[41] There are a variety of ways to estimate the time of their origin. One of the clues is the language. The Sanskrit language of Vedas--Vedic Sanskrit--is different from the classical Sanskrit. Certain forms of verbs and nouns, a certain freedom of style prior to the later Grammarians' codification of the Sanskrit language, makes the Vedic language distinctive.

Another way of identifying its time period is the mention of Veda in other sources whose chronological dates are known with some certainty. For example, Buddha's lifetime is known with some degree of certainty to be B.C. Whether Buddhist texts mention a particular tenet of Veda or remain silent regarding certain doctrines, may be helpful in determining if that Vedic text was earlier, contemporary with, or after Buddha's period.

The people who composed Veda are believed to have come from the Northwest, with one group coming to India and another going towards Iran and Europe. Comparison of the Vedic language

[41] Dasgupta, A History of Indian Philosophy, vol. 1, p. 10.

and personalities with those mentioned in the Avesta texts also helps us to estimate the time period. For estimating the time of the later commentarial literature, even the Tibetan translation corpus helps to narrow down the dates of some of the texts. The original entrants to India coming from the Northwest arrived on the plains of the river Sindhu and its six tributary rivers, the province of seven rivers, sapta-sindhu pradeśa. It is the river Sindhu which gives the word Hindu, meaning inhabitants along the river Sindhu, and India meaning where those people inhabit. After a few centuries the people migrated eastward to the plains of the river Ganges. The mention of a particular river in the Vedic composition gives us a clue whether it was composed earlier or later in relation to the composers' arrival into India. The agriculture along the Sindhu river was wheat based, while that along the Ganges was rice based. The mention in the literature of crops cultivated at the time helps us in determining its period of composition.

It is believed that Vedic composition must have spanned over two or three centuries from its first articulation to its final form. The Vedas were transmitted through an oral tradition. They were taught from a father-teacher to the son-pupil, who in turn taught his own son-pupil, and so on. This kind of close-knit familial transmission

helped to develop different family traditions and recensions of Veda.

The Vedic literature is quite large. The Ṛgveda-saṃhitā alone comprises material equivalent to all the surviving poems of Homer. It is remarkable that such vast numbers of works were transmitted so faithfully across generations and centuries. There were several safeguards that protected the Vedic text from any corruption. It was proposed and believed by some that Vedas were eternal, in that there was no time when Vedas were *not* .

Another precept was that Vedas were of superhuman origin. Even deities, mentioned in the texts, themselves depended upon the Word in the Vedas as their foundation. Some commentators proposed that Vedas were composed by God and of course, it follows that it would be sacrilegious to tamper with such a text.[42]

In addition, some practical care was taken in the transmission of the text. This was in the form of creating ancillary texts to ensure fidelity to the original Vedic text. One such ancillary work was called pada-pāṭha, literally, word-text. It was comprised of the words of the Vedic text in an analyzed form, i.e., without their saṃdhi or euphonic compounds.

[42] Gonda, Vedic Literature, pp. 7 - 8.

Next was krama-pāṭha, a step-by-step arrangement, where each word is mentioned in relation to the one before and the one after it. Based on krama-pāṭha is a jaṭā-pāṭha, a 'twisted-hair' arrangement which includes reverse word order (ab, ba, ab, bc, cb, bc, etc.). Even more complex is ghana-pāṭha which involves two and three words and their reverse order (ab, ba, abc, cba, abc, bc, cb, bcd, etc.).

In addition to these arrangements, there is another linguistic apparatus called prati-sākhya, which guides one to reconstruct the original saṃhitā text from pada-pāṭha, word text.[43]

It is with this Vedic corpus, transmitted with highest fidelity, that āyur-veda identifies itself. This is even more remarkable when we consider that the attitude expressed in some of the portions of the Vedas towards 'physicians' and āyurveda was less than complimentary, if not outright derogatory:

> (A twice-born man) who does not know the Veda (can)not be (called) a Brāhman, nor he who lives by trade, nor he who (lives as) an actor, nor he who obeys a Śudra's commands, nor (he who like) a thief (takes the property of others), nor he who makes his living by the practice of medicine.[44]

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[43] Gonda, Vedic Literature, pp. 15 - 19.

[44] Buhler, Sacred Laws of the Āryas part 2, p. 17.

We must acknowledge here that much remains to be done regarding historical and philological studies of āyurveda when one compares them with the work done in the study of Ṛgveda. Caraka-Saṃhitā as āyurveda identifies with Atharvaveda, the fourth Veda, which deals with curative chants and charms. The āyurveda is also called a 'paṃcam Veda,' 'fifth Veda.' We do not have sufficient evidence to conclude that there existed a Veda of medical subject matter, separate from the four Vedas.[45] Āyurveda is also called upveda, 'auxiliary veda,' and vedāṇga, 'branch of Veda.'

Caraka describes transmission of āyurveda as follows: Brahma -> Prajāpati -> Aśvins -> Śakra (Indra) --> Bharadvāja -> Punarvasu (Ātreya) -> Agniveśa and other pupils.[46] From Brahmā to Indra it is within the domain of gods, and from Bharadvāja onwards it is within the human domain. It was the superior intellect of Agniveśa that made him the first one to compose the medical

[45] Dasgupta, The History of Indian Philosophy vol. 2, pp. 273 - 277.

[46] Caraka Saṃhitā (Hereafter, CS). 1. 1.4 - 5, 30 - 31.

brahmaṇā hi yathāproktamāyurvedaṃ prajāpatiḥ |
jagrāha nikhilenādāvaśvinau tu punastataḥ ||
aśvibhyāṃ bhagavāñchakraḥ pratipede ha kevalam |
ṛṣiprokto bharadvājastasmācchakramupāgatamat ||

atha maitrīparaḥ punyamāyurvedaṃ punarvasuḥ |
śiṣyebhyo dattavān sadbhyaḥ sarvabhūtānukampayā ||
agniveśaśca bhelaśca jatūkarṇaḥ parāśaraḥ |
hārītaḥ kṣārapāṇiśca jagṛhustanmunervacaḥ ||

treatise.[47] Caraka-Saṃhitā is the redaction by Caraka of that treatise of Agniveśa.

As a historical person, Caraka is difficult to locate in time and place, although in ancient Indian literature the name 'Caraka' does occur. The difficulty is in determining whether 'Caraka' in one context is identical with our Caraka, the redactor of Agniveśa's treatise. It is interesting to note that 'Caraka' primarily denotes 'one who moves about' or 'a wanderer' and was mentioned with disapproval in Śatapatha Brāhmaṇa.[48]

Whether there was a clan or a guild of wandering physicians in those times and the redactor of Caraka-Saṃhitā was a family name of such a person can be only a speculation. Most of the scholars place Caraka in the period going from 78 A. D. to 200 A.D. [49,50]

Caraka describes āyurveda as a source of knowledge about the 'comfort' and 'discomfort' of life and measurements thereof.[51] Again, āyurveda is a system which provides knowledge about life, its length

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[47] CS. 1. 1. 32.
buddherviśeṣastatrāsīnnopadeśāntara muneḥ |
tantrasya kartā prathamagniveśo yato'bhavat ||

[48] Macdonell and Keith, Vedic Index of Names and Subjects vol. 1, p. 256.

[49] Larson and Bhattacharya, Encyclopedia of Indian Philosophies: Sāṃkhya p.15.

[50] Riepe, The Naturalistic Tradition in Indian Thought, p. 180.

[51] CS. 1. 1. 41.
hitāhitaṃ sukhaṃ duḥkhamāyustasya hitāhitam |
mānaṃ ca tacca yatroktamāyurvedaḥ sa ucyate ||

and the materials, attributes and actions which affect the lifespan.[52] The aim of the āyurveda is clearly defined from the very first verse as being concerned with long life.[53] It is emphasized again in that Bharadvāja, the seer, is described as 'one who is desirous of long life.' [54] This repetition is particularly noteworthy because, generally speaking, Vedic authors were economical with their use of words.

In the same stanza mentioned above, it is stated that Bharadvāja approached Indra to gain the knowledge he desired. There are two points of interest in this. First, the knowledge that is about to be received by the seer and described subsequently by him to his followers was obtained from the divine source, Indra, considered the helper and protector of the worshipers.[55]

Second, Indra is the chief of the gods who have drunk the amṛita (ambrosia) and thus are immortals.[56] Who else better to transmit the knowledge of longevity from the Supreme Being

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[52] CS. 1. 30. 23.
tadāyurvedayatītyāyurvedaḥ kathamiti ceta ucyate svalakṣaṇataḥ sukhāsukhato hitāhitataḥ pramāṇāpramāṇātaśca yataścāyuṣyāṇi ca
dravyaguṇakarmāṇi vedayatyato'pyāyurvedaḥ |
tatrāyuṣyāṇyanāṣyuyāṇi ca
dravyaguṇakarmāṇi kevalenopadekṣyante tantreṇa ||

[53] CS. 1. 1. 1.
athāto dīrghaṁjīvitīyamadhyāyam vyākhyāsyāmaḥ ||

[54] CS. 1. 1. 3.
dīrgham jīvitamcnvicchanbharadvāja upāgamat |
indramugratapā buddhvā śaraṇyamamareṣvaram ||

[55] Macdonnell, A Vedic Reader for Students, p. 44.

[56] Oldenberg (Tr. Shrotri), The Religion of the Veda, pp. 90 - 91.

(Brahmā) to a human being, albeit a seer (Bhardvāja), than the immortal god (Indra) himself? Brahmā is the progenitor of the universe. The creation of "life science" is thus assigned to the god responsible for creation of life itself. Prajāpati literally means the lord of the people. Aśvins were the physicians of the gods. Clearly, the redactor of the Caraka-Saṃhitā text aligns himself to the Vedic tradition for transmission of knowledge.

But āyurveda is a practical science as it proclaims its own importance *vis-a-vis* other aims of human life. There are four recognized main aims or activities of human beings, namely, dharma, the Law, the Norm or the prescribed ritual; artha, material desires; kāma, sensual desires; and mokṣa, liberation. Caraka says that good health is the foundation for all four aims of life.[57] Āyurveda is as important as, if not more so than, other Vedas, since diseases destroy life and without life one cannot pursue what is a 'good aim' (śreyaś) in life. There was a time when only three, dharma, artha and kāma, were considered as the principal human goals in Vedic literature. Mention of the four aims in Caraka-Saṃhitā allows us to locate, however imprecisely, āyurveda in a historical time frame.

[57] CS. 1. 1. 15.
sukhopaviṣṭāste tatra puṇyāṃ cakruḥ kathāmimām |
dharmārthakāmamokṣāṇāmārogyaṃ mūlamuttamam ||

One of the verses in Caraka-Saṃhitā tells us that the whole world rests upon the tripod that is *mind* , *body* and *soul.* The scope of the metaphor of a tripod and what it supports is not confined to the field of medicine. Rather, it is stated that this tripod supports the whole world structure as such. By implication, any consideration of issues of health and life--inasmuch as they are part of this world--also has to be dependent upon these three entities. Everything, then, stands or falls depending on whether one pays attention to or neglects these three entities: mind, body and soul. Further, by evoking an image of a tripod, all three are put on an equal footing as part of a supporting structure.

Moreover, the metaphor of a tripod made up of mind, body, and soul indicates a certain philosophical position taken by Caraka. There were some recurring questions troubling the ancient seers and philosophers: What is the cause of unhappiness? What is the cure of this unhappiness? That human life contained a certain amount of unhappiness was commonplace. There was a need to search for a diagnosis and cure for human misery. If, for example, the world we experience, including our lives, consists only of 'physical entities,' then the road to happiness would be nothing but material acquisition for physical comfort, with a simple equation of 'the more the

merrier.' Though in a somewhat abbreviated form, this is an outline of Indian materialism of the Cārvaka School.[58] Their motto was 'ṛuṇaṃ kṛtvā, dhṛtaṃ pibet,' borrow and drink the draught (incur the debt and drink the clarified-butter drink). By including mind as well as soul in its world view, Caraka-Saṃhitā states its case against such materialistic philosophy.

Quite different problems were raised by the Buddhist philosophy. Buddha saw misery, duḥkha, in the world and offered a solution for it. The main source of the misery was desire, taṇhā.[59] There were two approaches to dealing with the misery caused by desire. One was to recognize the world we see and the objects of desire as illusory. If the objects were not 'real,' then one's desire for them is pointless and can be eliminated. This was the approach of the Vedānta school of philosophy. The Buddhist way of eliminating misery was more radical. If there were no subject as such, then there could not be anyone to have any desire at all. The Buddhists were, thus, anātmavādin, 'non-soul believers.' They postulated that there is no real 'I' or real subject. As Matilal puts it:

There is only a conglomerate of five aggregates, each

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[58] Radhakrishnan and Moore, A Source Book in Indian Philosophy, pp. 227 - 249.

[59] Smart, Buddhism in The Encyclopedia of Philosophy p. 417.

element of which is pushing ahead on its own, but which jointly falsely create a sense of unity that plays the role of the subject. The continuity or flow of these five phenomenal series allows for the identity of the person over time. If the liberating insight shatters the unity of the subject in this way, desire, etc. are thereby shattered altogether. And if the unity of the subject is lost into the multiplicity of fluctuating phenomena, the object to be grasped by perceptions and intended by desires, etc., are also automatically shattered into phenomenal pieces.[60]

Caraka takes issue with this position by proposing the three bases of the world structure, which includes soul. Caraka's genius lies in formulating a system that eschews the 'Idealism' of the Vedānta (which views the world as an illusory phenomenon) as well as the 'phenomenalism' of Buddhism (which takes the world of a subject and object both as only a series of phenomena). Caraka, then, accepts the 'body' as part of the 'real' world while simultaneously recognizing the presence of a 'soul' too.

The other notable feature of the tripod world structure, and its inclusion in a medical treatise, is that it provides a single paradigm

[60] Matilal, Nyāya Critique of the Buddhist Doctrine of Non-Soul, J Indian Phil 17:1989, p. 68.

explaining all corporeal as well as cosmological entities.

Thus, Caraka's position raises interesting philosophical implications which we hope to investigate in subsequent chapters. Towards this end, we will examine, among others, questions such as: What is an individual person? How does an individual come into existence? What is mind? What are the relations between the mind and the body, and between the mind, body and soul? How does this knowledge relate to the physician's understanding of illness and treatment? How does this understanding influence the actions of individuals in general and of physicians in particular? In other words, which--if any--philosophical presuppositions influence the practice of medical science and ethics? What is the nature of interconnection between ancient Indian medicine and Indian philosophy?

The task, thus outlined, is impossible to be completed in a single work such as this. However, we can attempt to present some important findings which can be a prologue to further investigation in this field. More importantly, in the process, we hope to formulate some fundamental questions of philosophical interest related not only to ancient Indian medicine but also to contemporary medical science.

(3)

Six Schools of Indian Philosophy

There are several misconceptions prevalent about Indian philosophy. For example, one of the assertions made in the past was that there is no philosophy in Indian literature. Matilal illustrates this point by giving an example. He cites a quotation from John Locke in An Essay Concerning Human Understanding (Book II, ch. XIII, 19.) and offers a critique.

> 'Had the poor Indian philosopher (who imagined that the earth also wanted something to bear it up) but thought of this word substance he needed not to have been at the trouble to find an elephant to support it, and a tortoise to support his elephant; the word substance would have done it effectively.' It would be impossible to find a text in classical Indian philosophy where the elephant-tortoise device is put forward as a philosophic explanation of the support of the earth . . . Had Locke read any Indian philosophical texts (none was available in English at that time as far as we know) . . . he would no doubt have been struck by the obvious similarities in certain problems of

empirical philosophy which he and these early Sanskrit writers were facing. Indeed the notion of substance or dravya as a support where properties 'inhere' was at least as old as the Vaiśeṣika-sūtra (c. 100 BC).[61]

Another criticism of 'Indian Philosophy' was that we do not find anything in it corresponding to Greek philosophy. Hegel says in his Lectures on the History of Philosophy: "First of all, we meet with oriental philosophy. We may regard it as the first part, thus as real philosophy; but we may also see it as preliminary, as a presupposition of philosophy, and we begin only with Greek philosophy. . . In the formation of the oriental world, we do find philosophizing, too - indeed, the most profound philosophizing. . . But insofar as it remains the most profound, it remains also abstract. . . For us the real philosophy begins only in Greece. Measure and clarity begin here."[62]

Moreover, prominent philosophers like Husserl and Heidegger do not consider Greek-European philosophy as one among many, but as *the philosophy*. Accordingly, other traditions will have to Europeanize themselves to be recognized as philosophy, whereas Europeans should never, for example, have to Indianize themselves.

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[61] Matilal, Perception, pp. 3-5.
[62] Halbfass, India and Europe, pp. 97-98.

Heidegger refers to this as the complete Europeanization of the earth and of mankind, so that only the Greek-European traditions have a genuine concept of philosophy.[63]

This raises the whole issue of what *philosophy* is. If one takes a Greek-Western philosophy paradigm only, then we can admit only the thought-heritages of other civilizations under the heading of 'philosophy' only to the extent that they match the given paradigm. The term which corresponds to 'philosophy' in India is darśana, which can be translated literally as 'view.' In this sense, darśanas are various Indian philosophies or 'view points.' The question whether there is anything that can be called 'philosophy' in India has been taken up by Mohanty in his essay on Indian philosophy:

> Does the Indian darśana, by virtue of its subject matter, its concerns, its methodology come under the purview of the word 'philosophy'? . . . I believe that there are enough similarities between Indian darśanas and the western philosophies to justify translating darśana as 'philosophy' - enough differences erupting precisely where similarities first showed themselves to justify talk of *Indian* philosophy. 'Philosophy' is a concrete universal in the

[63] Halbfass, India and Europe, pp. 169.

Hegelian sense, not as abstract identity. The universality of rational thinking transcends and yet comprehends *local* differences, it lives in and through such differences.[44]

However, the main thrust of our investigation is not to engage in a debate about Western concepts of Indian philosophy, as the work seeks to relate a philosophical inquiry to our understanding of medical science. If philosophy is taken to be an activity which attempts to put forward concepts and theories, and in so doing to understand the world around us, there are many examples in the Indian literature which can be called philosophy.

Still, there could be another distortion in the picture of Indian philosophy as a result of some scholars emphasizing one or the other school at the expense of the rest. The system which has received the most attention in the West in this regard has been the Vedānta.[45] During the past century, Vedānta's position has been portrayed so prominently in Western literature that for many a reader the Indian philosophy is thought of as culminating in, if not confined to, Vedānta and nothing else. Further study by several scholars in this century, however, has given us a better account of Indian philosophy.

But even when we recognize Vedānta as one of the many, and

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[44] Mohanty, Essays on Indian Philosophy, pp. 328 -330.
[45] Mittal, Materialism in Indian Thought, pp. 1 - 2.

not the premier school, we still encounter certain misconceptions about Indian philosophy. Daya Krishna has elaborated his concerns in this regard referring to such misapprehensions as 'Three Myths about Indian Philosophy':

> After all, what exactly is meant by describing a whole philosophical tradition as 'spiritual'. The term, in the ontological context, means that the nature of ultimate reality is held to be the same or similar to that of mind or spirit. Its distinctive feature lies in the assertion of the primacy of consciousness as opposed to the inertness associated with and displayed by objects that are purely material in their nature . . . Viewed in this perspective, Indian philosophy can hardly be characterized as spiritual in character. [66]

Indian philosophical deliberations are not limited to 'other worldly' or 'spiritual' matters only. There is ample evidence to show that Indian thinkers and debaters have been concerned with matters of this world and happiness in this world as well as in the next. This is especially true of a school of materialists called Cārvākas, who are not well known in the West but who believed only in the existence of matter and material things and not in any extra-material causes or

[66] Daya Krishna, Indian Philosophy, p. 4.

goals for human life. Aside from Cārvākas, even an 'orthodox' system such as Mīmāṃsā is practical in the sense of being 'practice oriented,' accepting the reality of the world 'as is.'

To take another example, the Buddhists too were mainly concerned with the practicality of identifying the misery of life and finding a solution for it. Buddha refused to get lost in discussion of subjects like 'nature of soul,' etc.[67] If someone finds a person with an arrow stuck in him, the prime concern should be the way to relieve the agony of the injury. To start and be preoccupied with the arrow, its origin and its workmanship, is to miss the point according to Buddhist philosophy. By the time such idle information is obtained, the injured person will suffer needlessly and may not even survive the injury.

From the beginning of this century, there has been increasing interest in Indian philosophy. In several universities of the United States, Germany, and England, there have been ongoing programs for its study. New correlations and comparisons between Indian and Western philosophies are being explored. For example, Jacobson proposes that there is some evidence of Buddhist influence

[67] Kosambi, Ancient India, pp. 106 - 107.

on Hume. Jacobson quotes the Buddhist scholar Stcherbatsky as follows:

According to the Buddhists, no Self, that is, no unitary, permanent feeling or thinking entity, comes into the field of inquiry. We know only the body, which is visible a composite, growing and decaying thing, and a number of phenomena, feelings, perceptions, wishes or wills, cognitions - in philosophic language, a number of states of consciousness. . .[Jacobson, then, adds:]

The similarity here with Hume is striking. . . For Hume, too, the only thinker is the thought, the only perceiver the perception, the only craver the craving. [68]

Another author also has pointed to the resemblance between the positions of Buddha and William James on the problem of the self.

[I]n dealing with the problem of the self, Gotama [Buddha] kept close to what was given phenomenologically in the flux of immediate, prereflective experience. In emphasizing these experiential aspects of the self-idea as opposed to the jungle of metaphysical puzzles, the Buddha's philosophical

[68] Jacobson, The Possibility of Oriental Influence in Hume's Philosophy p. 18.

position may rightly be designated as a "radical empiricism" - a phrase which William James made popular centuries later.[49]

Śaṃkara was a preeminent Vedāntin scholar in eighth century India. He discussed at great length the problem of error and illusion with regard to the different states of dream and waking. Schroeder compares Śaṃkara's and Descartes' treatment of this subject as follows:

> To form a methodological basis for doubt about these beliefs, Descartes supposes that there is an 'evil genius' who deceives him constantly about these things. All of Descartes' former beliefs are methodologically doubted in such a way that even Arithmetic and Geometry do not 'survive.' Descartes supposes that he is under the power of illusion generated by some unknown deceiver which keeps him from what would be true knowledge and deceives him even about the things that he thinks he knows best.
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> This is very similar to Śaṃkara's ideas about māyā. Śaṃkara posits that human beings are under sway of māyā, which is not illusion but is that which causes people to take

[49] Mathur, The historical Buddha (Gotama), Hume, and James on the self in Philo East West, 28, 1978, p. 258.

waking experience to be ultimately real, when in fact it is not. Māyā is not generated by a particular deceiver. It is rather a beginningless phenomenon, a 'given' for which there is no adequate explanation or point of origination. Māyā, spoken of epistemologically as avidyā, keeps people from true knowledge, and not so much deceives them about the things they think they know best as limits their knowledge to that of things which are epistemologically and ontologically only second-rate.[70]

Another example of comparative evaluation is Sathaye's examination of Aitreya Brāhmaṇa of Ṛgveda and Plato's *Republic*. He writes, "Both the *Republic* and the Aitreya Brāhmaṇa interpret society in terms of hierarchical structures; in neither is the hierarchy determined by economic factors. For Plato, possession of knowledge, in his special sense, is the criterion for the selection of rulers, and those who only have beliefs and opinions are relegated to the lower strata of society. In the Aitreya Brāhmaṇa the criterion used is the capacity to possess esoteric knowledge appertaining to the conduct of rituals and sacrifices." [71]

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[70] Schroeder, Levels of truth and reality in the philosophies of Descartes and Samkara, Phil East West, 35. 1985, p. 290.

[71] Sathaye, The Aitreya Brāhmaṇa and the Republic, p. 435.

Of course, we should recognize that there are a great number of aspects in the above examples of comparison, which can and ought to be challenged and controverted. The examples given are not offered as proofs for any one thesis among them, but only to indicate the variety of interest shown recently in Indian philosophy and its relation to Western philosophy.

Any study of a large subject like Indian philosophy, delineated by Geographical or Traditional parameters, requires some sort of classification just so that one can deal with the subject in a somewhat manageable manner. This classification can be rigid or flexible, traditional or innovative. It is usual to classify Indian philosophy into two main groups: nāstika ('it-is-not' believers) and āstika ('it-is' believers).

Nāstika do not regard the Vedas as infallible and do not depend on the Vedas for the validity of their own doctrines. There are mainly three schools in this group: Buddhist, Jaina, and the Cārvāka. The group under the heading āstika subscribed more or less to the authority of the Vedas. This group consisted of six schools: (Pūrva) Mīmāṃsā, Vedānta (Uttara Mīmāṃsā), Nyāya, Vaiśeṣika, Sāṃkhya and Yoga.[72]

[72] Dasgupta, A History of Indian Philosophy, v. 1.pp. 67 - 68.

Daya Krishna, however, challenges the very concept and utility of the term 'school' in reference to Indian philosophy. He writes:

> If, therefore, we deny the 'authoritative' character of Indian philosophy, then, in an important sense, we deny the concept of 'schools' also. There is no such thing as final, frozen positions which the term 'schools', in the context of Indian philosophy, usually connote. If 'schools' change, develop, differentiate and divide, then they are never closed, finished or final with respect to what they are trying to say. There could, then, be no fixed body of Nyāya, Vaiśeṣika, Sāṃkhya, Mīmāṃsā, Vedānta, Buddhist, Jaina or Cārvāka positions except in a minimal sense." [73]

But a case can be made that Indian philosophy can be studied more easily under the heading of different 'schools,' if we understand the schools as traditionally developed clusters of thoughts and thinkers. Mohanty puts this problem into proper perspective:

> You do not only think and interpret from within a tradition - and not in an empty logical space - but as you carry the interpretive history forward, the tradition also undergoes changes while the interpretive intention wants to hold on to

[73] Daya Krishna, Indian Philosophy, p. 13.

> and preserve a sense of identity in and through these changes. Tradition is not a cluster of *facts* about documents, but a horizon of interpretive possibilities opened up and instituted by the founding texts; . . .Whether this *in fact* was so is a pointless question, for again we are trying to articulate how a tradition, in course of its history, *perceives itself* . . . Sùch a developmental-interpretive conception of a tradition can, I believe, restore the validity of the locution of 'schools' in the face of many of Daya Krishna'a critiques.[74]

To understand the various schools of Indian philosophy, we can use the Vedas as a demarcating device since they are some of the oldest texts that have come to us from ancient times. There can be debate about exactly what constitutes Vedas--since many of the stanzas from Ṛgveda are found in Sāmaveda also. In addition to that, even from the generally accepted corpus of the Veda, there are divergent opinions among the commentators about which portions to include in the Veda 'proper.'[75]

The reasons why we can still use Veda as a demarcating line in our study is that, however faithfully or perfunctorily, almost all the schools of Indian philosophy addressed Vedic positions either in

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[74] Mohanty, Essays on Indian Philosophy, p. 53.
[75] Daya Krishna, Indian Philosphy, pp. 63 - 94.

subdued acceptance or substantial refutation.

The impact of Veda in the context of Indian philosophy cannot be overemphasized. The extent to which the tribute paid to Veda by later commentators and philosophers was genuine or not is a matter of debate. But every serious thinker in Indian philosophy had to acknowledge and contend with Vedic thought. This resulted either in agreement or disagreement. The relative positions of the different schools with regard to the Vedas give us a topography to locate a particular system's position in the overall scheme of Indian philosophy.

The earliest of the texts, Ṛgveda, was more poetic than philosophical. But it still contained some profoundly speculative thoughts about the origin of man and the universe that resemble some of what we find among the Pre-Socratics:

> There was neither what is nor what is not, there was no sky, nor the heaven which is beyond. What is covered? Where was it, in whose shelter? Was the waterthe deep abyss (in which it lay)?
>
> There was no death, hence there was nothing immortal. There was no light (distinction) between night and day. The one breathed by itself without breath, other than it there

has been nothing. Who then knows, who has declared it here, from whence was born this creation? The gods came later than this creation, who then knows when it arose? He from whom this creation rose, whether he made it or did not make it, the highest seer in the highest heaven, he forsooth knows, or does he not know?[76]

The schools of philosophy which did not accept the authority of the Vedas were three: 1. Buddhist, 2. Jaina, and 3. Cārvāka. Out of these the Cārvāka were materialists. They did not believe in 'soul', 'after life', 'god' or karma. They believed in obtaining all the pleasures that can be obtained in this life in whatever way one can, although they did recognize that some times a short-term gain--getting some material thing by theft--might be outweighed by a long-term misery--getting caught and punished by the authorities. Not much of the literature from the Cārvākas has survived. We glean their views from the criticism they receive from the other philosophers.[77]

The Buddhists and Jainas also did not accept the authority of the Vedas. The Buddhists did not believe in the ātmā (soul) whereas Jainas did believe in existence of the soul. Both the Buddhists and

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[76] Radhakrishnan, Indian Philosophy vol. 1. pp. 100 - 101.

[77] Mittal, Materialism in Indian Thought p. 23.

the Jainas, however, believed in *karma*, that is, they believed that one's actions have consequences that one has to experience later. The Buddhists consider *karma* as a cause-and-effect relationship in momentarily existing entities; the objects and continuities that we observe and feel are, for them, mere constructs of the mind. For the Jainas, *karma* was a particulate, albeit subtle, material substance which attached itself to the soul. Consider the following classification of the Indian Schools of Philosophy: (Fig. 1.)[78]

Such a classification should be taken only as a useful, yet simplified, chart to guide one through the vast literature available. Some of the concepts of one school are also acceptable by other schools. Conversely, even in the same school, there are instances of substantial disagreement between different proponents.

We should also keep in mind some features of the history of Indian philosophy which differentiate it from that of Western philosophy. First, the chronology of several Indian texts is difficult to ascertain. One is compelled to estimate the year of composition of a particular text from the ancillary evidence, such as its mention by other philosophers or its mention in other literary works of poetry or drama. At times, the era of a historical personage is wellestablished.

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[78] Figure 1, p. 61.

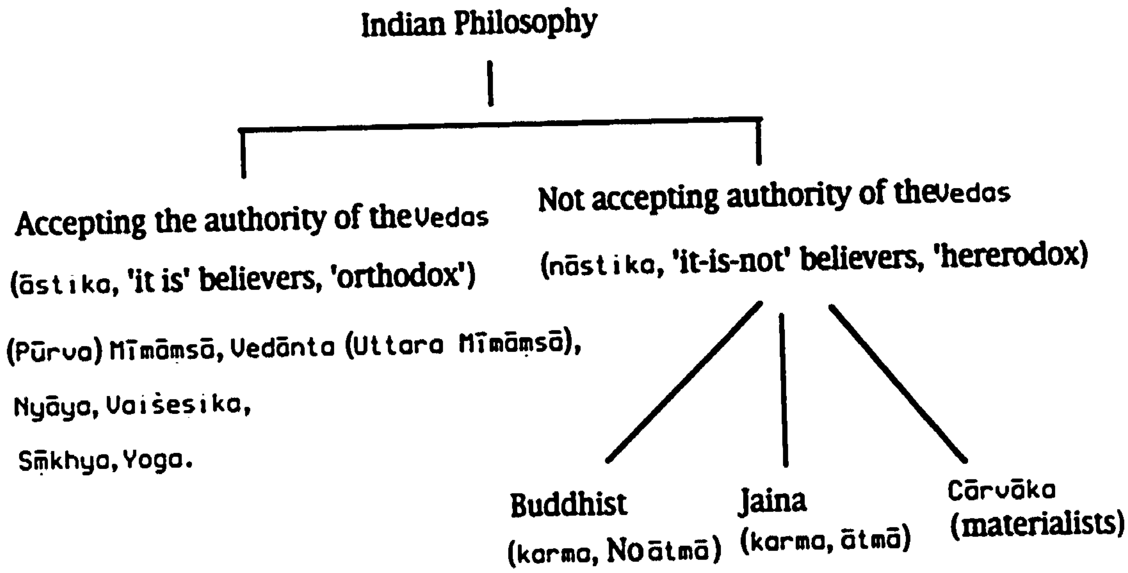
For example, we know with some degree of certainty the time of Gautama Buddha. The correlation of other texts with the presence or absence of any reference to Buddha or Buddhist thoughts and arguments gives us some clues for dating a given text as pre- or post-Buddhist.

An additional difficulty in assessing historical chronology in Indian philosophy is the tendency of the authors to downplay their contribution to the subject upon which they are commenting, though this difficulty is more apparent than real. We do not have to accept the modesty of the commentators at its face value. Neither do we have to subscribe to the almost superhuman status given by some of the commentators to their predecessors, however valuable or erudite their scholarship.[79]

In a fourteenth century work, Sarvadaśanasaṃgraha by Mādhvācārya, the author discusses doctrines of sixteen schools.[80] To discuss all of the schools here is beyond the scope of this work. By necessity, we will limit our discussion to what we can think of the six main schools adumbrated in our scheme of classification. Even these schools had their subdivisions and enlargements from the time of the original compilers of their main texts.

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[79] Potter, Encyclopedia of Indian Philosophies: Advaita Vedānta p. 9 - 18.
[80] Raju, Structural Depths of Indian Thought p. xx.


Indian Philosophy
Accepting the authority of the Vedas
(āstika, 'it is' believers, 'orthodox')
(Pūrva) Mīmāṃsā, Vedānta (Uttara Mīmāṃsā),
Nyāya, Vaiśesika,
Sāṃkhya, Yoga.
Not accepting authority of the Vedas
(nāstika, 'it-is-not' believers, 'hererodox)
Buddhist
(karma, No ātmā)
Jaina
(karma, ātmā)
Cārvāka
(materialists)

(Fig. 1.)

To document the development of even one school would be an enormous task. But this limitation, though it needs to be pointed out, is not as severe for us here as it might appear at first glance. The reason is that our purpose in getting to know Indian philosophy is to help us to discern the relation that may have had with ancient Indian medicine. It is certainly true that a detailed examination of each of the schools and their minute variations will throw some light on the nature of the ancient Indian medical system. Such a detailed investigation not only would be useful in understanding medical science, but would also enhance our understanding of philosophy itself.[81,82] However, our interest is to indicate and establish a preliminary case for the interconnection of Indian philosophy and Indian medicine at their origin.

We want to situate ancient medical science within the context of Indian philosophy. The aim is to indicate the relation of medicine to philosophy and to examine how such a relationship correlates with the practice of medicine. During such an investigation, if the case for an overall connection between medicine and philosophy is established, then even if the details of the design of the chain should change, hopefully the linkage between the two would hold.

[81] Dasgupta, Natural Science of the Ancient Hindus, pp.51 - 83.
[82] Larson, Āyurveda and the Hindu philosophical systems pp. 246 - 259.

Let us review the six main schools of philosophy then. It is not our contention here that the schools of philosophy not discussed did not influence or were not influenced by medicine. But as the term for medical science, āyurveda indicates, this science is overtly aligned with Veda. Therefore, at least in this exploration of a connection between science and philosophy, it makes sense to look initially into the systems that subscribed to Vedas, however tenaciously or tenuously.

Depending on historical and philosophical affinities, the six schools are customarily grouped in pairs, thus forming three pairs. We begin with the first such pair, namely, Mīmāṃsā and Vedānta.

Mīmāṃsā:

Etymologically, mīmāṃsā derives from mīmāṃs, the desiderative and intensive of man- "to think."[63] It thus means 'thinking,' 'discussion,' 'enquiry.' Mīmāṃsā is also called Pūrva - earlier Mīmāṃsā, Vedānta being Uttara - later Mīmāṃsā. The Vedas were transmitted orally from teacher/father to pupil/son. As time passed, different families had different recensions requiring a clearer understanding of the instructions in the Vedas. As people spread out all over India and the sacrificial rituals became more intricate (and farther

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[63] Verpoorten, Mīmāṃsā Literature p. 1.

removed from the time they were first created), it became more and more necessary to elucidate the meaning of these instructions.

The foremost available text in mīmāṃsā literature is Jaimini-sūtra 'aphorisms/principles' by Jaimini, composed in 400 B.C. As the aphorisms are compact statements, the later commentaries on them help us to understand the text to some extent. The most quoted and noteworthy commentary of Jaimini-sūtra is Śabara-Bhāsya by Śabara. The main thrust of mīmāṃsā was to understand dharma.[84]

As dharma is not something physical or a sensible 'thing,' it is accessible and understandable only through the Vedas. Thus the mīmāṃsakas considered 'action' as prescribed in the Vedas as the most important part and the part that is to be followed as the great controller, not only of human beings but of the universe as a whole. Thus action was understood as being what is prescribed by the Vedas.

For the mīmāṃsakas, the aphorisms which contained injunctions and which prompted or ordered the follower to do the ritual sacrificial action were of paramount importance. All statements other than the injunctive ones in the ritual texts were to be

[84] Jha, The Prābhākara School of Pūrva Mīmāṃsā pp. 104 -112.

interpreted in the light of and subordinated to the injunctive statements.

The mīmāṃsakas considered happiness as the human aim of life, 'action' as prescribed by the Vedas as the means to achieve it. There was a question debated whether what is prescribed by the Vedas is 'good' for us because it is prescribed by the Vedas or whether it is prescribed by the Vedas because it is 'good.' One of the commentators, Prabhākara, proposes that the commands of the Vedas must be followed by the mere fact of their being Vedic injunctions. As there cannot be anything false in the Vedas, these injunctions are inherently 'good.' Kumārila also recommends unquestioning implementation of the Vedic injunctions, but considers that the Vedas command us to do certain actions with an aim of achieving a reward. [85]

Now, if the Vedic injunctions were to be followed, then how does one ascertain their truth? What is the proof of the veracity of the Vedic injunctions? Such questions lead us to examine the various sources of knowledge put forward by the mīmāṃsakas. The word for the source of knowledge or means of knowledge is pramāṇa, pramā meaning accurate measurement. For mīmāṃsakas there are six

[85] Verpoorten, Mīmāṃsā Literature p. 33.

pramāṇas, sources of knowledge: śabda (word), pratyakṣa (observation/perception), anumāna (inference), upamāna (comparison), arthāpatti (postulation), and anupalabdhi (non-cognition).

With regard to śabda (word), for mīmāṃsakas the word of the Vedas was authoritative. As Veda tells us of things that are yet to come on account of our actions, these things are not accessible to the senses. Therefore, the knowledge obtained from the Vedas depends upon śabda (word). The Vedas were not written on paper or stone, but were orally/aurally transmitted. It was important for the mīmāṃsakas to have verbal testimony as an independent source of knowledge. The word for them was eternal. The Veda was also eternal and had no author.

The Vedic Sanskrit language was natural and the knowledge that the words gives us is a natural consequence of the power of the words. "If I utter the word 'chair' ten times, am I uttering ten different words or am I uttering the same word ten times? The Mīmāṃsaka say that, if the word is not the same, then it cannot have the same meaning."[86]

As for pratyakṣa (observation/perception), it is knowledge obtained directly through the senses. When objects come into

[86] Raju, The Philosophical Traditions of India p. 71.

contact with the senses and mind, such contact in the presence of 'soul' results in cognition, which is called pratyakṣa.

Anumāna (inference) is the knowledge obtained through syllogistic reasoning based on some previously obtained knowledge. For example,

There is smoke in the mountain.

Whenever there is smoke in the kitchen, there is fire in the kitchen.

Wherever there is smoke, there is fire.

There is fire on the mountain.

We should note that in this syllogistic presentation there is a term inserted which may appear superfluous to the Western logician, but is very essential for mīmāṃsakas. It is called 'example.' Mīmāṃsakas were realists, and by using an example they try to avoid logically valid but existentially absurd conclusions. For example, the following would be a valid inference by Western standards:

The sky-flower has fragrance.

All flowers have fragrance.

The sky-lotus is a flower.

Therefore, the sky-lotus has fragrance.

This is considered an invalid inference from the Indian

viewpoint. Since no example can be furnished about a flower growing in the sky, the structure of the inference would not permit any conclusion about the fragrance of the sky-lotus. Such a proposition would be deemed meaningless and dropped from discussion of valid inference.

Upamāna (comparison) is knowledge by analogy when an object is known by its similarity to another object. When one sees a water buffalo for the first time and recalls a bison which he had seen before, it is upam–ana (comparison) that gives him the knowledge of this similarity.

Arthāpatti (postulation) is yet another source of knowledge. Even if we cannot perceive magnetic force and gravitational force through our senses, we postulate them to explain the event of magnetic attraction or the falling of an apple from a tree. Another example of 'postulation' is: If it is true that Devadatta exists, and if Devadatta is not in this room, then by arthāpatti (postulation) we know that Devadatta is somewhere else, even if we cannot perceive that fact through our senses.

Finally, we come to anupalabdhi (non-cognition). If there is no pen on the table, we *can* cognize not only the table but also can the absence of a pen. Some, but not all, mīmāṃsakas accept non-cognition

as a separate source of knowledge. Others do not and maintain that when we cognize that there is a table and no pen on it, what we cognize is only the table, and the knowledge of an absence of the pen is merely a concept born of our anticipation of seeing a pen on the table.

For the mīmāṃsakas, knowledge is inherently true. It does not matter through what sources knowledge is known. If knowledge is not inherently true, then we have to know its truthfulness through another instance of knowledge, and so on *ad infinitum* . It is knowledge itself which is the proof of its own veracity. This is called the doctrine of svataḥ-pramāṇa (self-authentication).

The mīmāṃsakas accepted consistency as a proof for logical truth. But they were pragmatists and proposed that true knowledge is confirmed by its use in practice.

How one makes an error is an important area of enquiry for Indian philosophers. The most common illustration of this is that of 'the rope and the snake.' If one sees a rope and cognizes it to be a snake, what is the source of the error? Since the knowledge, 'that is a snake,' is obtained through pratyakṣa pramāṇa (observation), then if it is wrong, and since all of our knowledge ultimately depends on direct observation, all of our knowledge is suspect. We cannot be

certain of anything. If our knowledge is proved true as it is generated, and if we trust the veracity of our knowledge, then how does an illusion of taking a rope for a snake occur?

Suppose we are walking among tall grass and see a rope, mistaking it for a snake. Until and unless the illusion is corrected, we act as if we had encountered a real snake. The source of error is explained two ways. First, when we see the rope, we mistake it for a snake. But, in reality, there is no snake. The snake that we observe in the rope is the snake not seen but remembered. The error is in non-apprehension (akhyāti) of the difference between the seen rope and the remembered snake. Another way to explain the error is that when we see the rope and mistake it for a snake, we do not either cognize or not cognize the difference between the two. Instead, what happens is this: we cognize 'that is a snake.' In that knowledge we cognize 'that' and 'snake.' We do not observe 'rope' at all. We identify 'that' with 'snake.' There is no question of identifying the observed 'rope' with the remembered 'snake,' since at that particular moment of cognition we do not see 'rope' at all and we do not cognize 'snake' as a remembered snake but as a 'snake' observed. The error, according to this view, is mistaking 'that' (the demonstrative 'that') for 'snake' and not realizing that the

identification of 'that' is with the 'snake' remembered. This error is called viparīta khyāti (different cognition), as the snake is an object different from the rope. But both interpretations are by realists. For the mīmāṃsakas, not only is the rope real, but also the snake is real because it was cognized as evidenced from its being remembered.. So 'that' is real, 'rope' is real, and 'snake' is also real.[87]

For the mīmāṃsakas, as one author has remarked, "Cognition is not independent of the object cognized and the object is not another cognition."[88] For them, the world was always there. It was eternal, without a beginning or an end. The aim of life was happiness of the ātmā (soul, self), I-consciousness.

According to the mīmāṃsakas the world which is real can be described through various categories: dravya (substance, including sakti, potency), sādṛśya (similarity), guṇa (quality including saṃkhyā/number), karma (action), sāmānya (universal), abhāva (negation). Another classification is: dravya (substance), guṇa (quality), karma (action), sāmānya (universal), samavāya (inherence), śakti (potency), sādṛśya (similarity), and saṃkhyā (number).

The mīmāṃsakas subscribed to the presence of many individual selves or ātmās. If this were not true, then one's actions would not

[87] Raju, The Philosophical Traditions of India p. 73 - 75.
[88] Mittal, Materialism, op. cit. p. 255.

result in a reward for that particular doer. The ātmā can feel pleasure and pain. If not, then there is no reason to perform the various sacrificial rituals prescribed for that purpose by the Vedas. We can see that at the end of the fire sacrifice, only the ashes remain. But the sacrifice is done for a particular achievement of happiness, specifically for svarga (heaven). "The statement, 'he who sacrifices gains heaven,' is true only if we presume some connection between what we actually see--an act of sacrifice performed and finished, without any apparent results--and heaven attained at a later date. Looking at the sacrifice and seeing only a series of finite actions which do not attain permanence, Śabara says there needs to be something more: apūrva."[89]

Apūrva (literally 'not - prior') is postulated as a kind of potency which explains the lasting efficacy of a transitory ritual act. This kind of explanation was essential because for the mīmāṃsakas it was karma (action), especially those enjoined by the Vedas, which controlled the workings of the world. Even the gods were only of ancillary importance.

Vedānta is the second school which forms a pair with Mīmāṃsā. It is also known as Uttara or the later Mīmāṃsā, as it purports to

[89] Clooney, Thinking Ritually p. 227.

offer an exegesis of the Vedas and was later than the earlier Mīmāṃsā. Vedānta literally means 'Veda-end.' The Vedas have several sections that deal with different aspects of Vedic instructions. For example, Brāhmaṇas were instructions for sacrificial rites. The last sections of the Vedas are Upaniṣads which contain discussions considered more contemplative and more spiritually oriented than the earlier sections of the Vedas. Because Vedānta is a school which examines and explains the Upaniṣads--the end sections of the Vedas--it is known as the Vedānta. Also, as far as the Vedāntins were concerned, their system represented the culmination or aim of Vedic instructions. Thus, for the Vedāntins, the Vedānta presents the highest philosophical and spiritual truth, all other systems in the orthodox schools providing only a preparatory role for the understanding which the Vedānta provides.

The main text upon which Vedānta commentarial tradition rests is Brahma-Sūtra or Brahma-aphorisms by Bādarāyaṇa, whose date is assigned from 400 B.C. to 200 A.D., the best guess being about 200 B.C.[90] Vedānta differs from Mīmāṃsā in one fundamental respect. It gives priority to knowledge (jñāna) and places action (karma) in a subsidiary position in its philosophical hierarchy. In contrast to that

[90] Potter, Advaita Vedānta, op. cit. p. 10.

of Mīmāṃsā, its aim is not to wish for and strive for riches, here and now or in a life hereafter. It does not consider obtaining happiness of svarga (heaven) as the ultimate goal of human life. While it agrees with its predecessor that by following the sacrificial rites as prescribed by the Vedas one would obtain heaven, such an achievement is deemed inferior to what can be obtained if one gets true knowledge through a proper study and understanding of the scriptures. And this is the aim of Vedānta. Therefore, like Mīmāṃsā, Vedānta also concerns itself with the exegesis of the scriptural texts.

Vedānta believes that there is one Being, brahman. Depending on the interpretation of the relation of this Being to the world (and to individuals within it), one can classify Vedānta into different subgroups. One of the groups claims that the pure Being is the one and only real existent entity, and any plurality seen in the world is due to our ignorance of the true nature of our self which is identical with the supreme Being. That is the non-dualist (advaita) school. At the other end, the dualist position (dvaita) is also that there is one supreme Being, a true existent, but the individual souls are distinct from the supreme Being. It puts forward the arguments that the multiplicity we see is true as it arises from the one true Being.

According to the non-dualist (advaita) Vedānta, the true Being, brahman, denotes pure Existence, Consciousness, and Bliss. And it is due to māyā, the power of brahman, that the whole universe appears to come into being and appears as manifold to us, though in truth there is nothing existent except brahman. Actually, to talk in these terms is also misleading, because brahman and māyā are beyond description or analysis.

We are part of the world and, like other things of the world, we are also the product of the world. We accept the world as 'real,' 'existent,' in pragmatic actions, while all the time recognizing that from the viewpoint of ultimate considerations, the world is a illusion. The ātmā, self, is identical with brahman. The ātmā does not experience pleasure or pain. It is the animated self (jīva) that experiences pleasure and pain. Consciousness and the capacity to experience sensations by jīva is due to ātmā, but ātmā is merely an onlooker and this designation, too, is from the viewpoint of jīva. By itself ātmā is pure Being, indescribable.

Thus, in its non-dualist (advaita) type, Vedānta proposes four layers of experience of the world. The lowest level is called tuccha-sattā, insignificant existence. An example of this kind of existence in the world is 'a rabbit's horn,' 'a winged horse,' or the 'son of a

barren woman.' Though we can certainly imagine these entities, they are recognized as patently false and fanciful.

The next level of existent entities is called prātibhāsika-sattā. These entities are illusory things. The classical example is that of a rope mistaken for a snake.

The third level is called vyāvahārika-sattā. Once we realize that the experience of 'that is a snake' is mistaken and 'that' is in fact 'a rope,' then we are dealing at the level of pragmatic existence (vyāvahārika-sattā). But in reality, as advaita vedāntin still proposes, the only real existent entity is one pure Being, brahman which is the ultimate level of existence, pāramārthika-sattā.

Though there are efficient, instrumental, and formal causes in the world as such, these hold true in the world of perception only. In the ultimate understanding, only brahman--the Absolute Being--is all the causes at once.

Most of the Vedānta sub-schools accept all the sources of knowledge that the Mīmāṃsā accepts. But there is a significant difference between them. In the example of mistaking a 'rope' for a 'snake,' Mīmāṃsaka explains the error on the basis of mistaking the seen 'rope' for the remembered 'snake.' For the vedāntin, this will not be sufficient. For him, the seen 'rope' is real, but the 'snake' is

also not just a remembered 'snake.' One does not experience that 'this rope' is 'that past snake,' but reacts as if encountering 'this snake.' The 'snake' is not 'real,' nor 'not-real,' nor either, nor both. For the vedāntin, the error of this illusion is inexpicable. Ultimately, for advaita Vedānta, only the Absolute Being (brahman) is truly 'real.'

We come to the second pair, comprising of the Nyāya and Vaiśeṣika schools. First we look at the Nyāya school which deals with a method of debate including rules, logic and valid means of knowledge pramāṇas.

The Aphorisms of Logic (nyāya-sūtras) are ascribed to Gautama (about the 4th century B.C.).[91] The date of final redaction of the Aphorisms is difficult to determine with certainty.[92] Comparison with other doctrines and contemporaneous debates lead us to conclude that the redaction may have taken place in the first two centuries B.C.[93]

According to Nyāya, the objects of valid knowledge--knowable entities--are ātmā (self), body, senses, objects of senses, consciousness (buddhi), mind (manas), action (karma), motivation,

[91] Raju, Structural Depths of Indian Thoughts, p. 192.
[92] Keith, Indian Logic and Atomism, pp. 9 - 18.
[93] Matilal, Nyāya-Vaiśeṣika, p. 78.

rebirth, the fruit of action (phala), unhappiness (duhkha), and liberation (mokṣa).[94]

For Nyāya, the four means of knowledge are observation (perception, pratyakṣa), inference (anumāna), comparison (upamāna) and verbal testimony (śabda). Gautama states that in order to obtain 'the highest good,' nihśreyas (liberation), one has to understand reality correctly, because only then can one make an effort in a correct way to obtain 'the highest good.' For this purpose he worked with an epistemology comprising sixteen categories. The first two were 1. pramāṇa, valid means of knowledge (measure), and 2. prameya, knowable (measurable).

The next fourteen were various concepts related to the art of debate: 3. doubt (saṃśaya), 4. purpose (prayojana), 5. example (dṛṣṭānta), 6. established doctrine (siddhānta), 7. members of syllogism (avayava), 8. counterfactual conditional argument (tarka), 9. ascertainment (nirṇaya), 10. controversy (vāda), 11. wrangling (jalpa), 12. destructive dialectic (vitaṇḍa), 13. fallacies of syllogism (hetvābhāsa, false appearance of reason),14. quibbling (chala),15. futile argument (jāti), 16. grounds of defeat (nigrahasthānas).[95]

[94] Matilal, Nyāya-Vaiśeṣika, p. 79.

[95] Raju, Structural Depths of Indian Thoughts, p. 193.

Nyāya approach is to examine everything, including pramāṇa itself, critically. The subtle and detailed nature of such critique is illustrated in the following discussion of pramāṇa in Nyāya-sūtra:

> [Objection] Perception [pratyakṣa] etc. are 'without validity' (apramāṇya), because of their 'ineffectiveness' in the three times' (traikālya-asiddhi). ll ii. 1. 8ll
>
> Vātsāyana argues that the objection, viz. perception [pratyakṣa] etc. are without validity, may be intended to deny their existence or to prove their non-existence. The first alternative is impossible, because the very attempt to deny their existence presupposes the admission of their existence inasmuch as there is no sense in demolishing the possible existence of something which has no existence at all. . . the very argument expressing the non-existence of the pramāṇas will be considered as a pramāṇa, because the argument itself ascertains a knoledge, which is precisely the function of a pramāṇa."[46]

As Nyāya school had great influence on rules of debate adopted by almost all other schools, the anatomy of an argument given in the Nyāya school is important to note. Matilal has described it as follows:

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[46] Chattopadhyaya, Nyāya philosophy, pp. 21, 26.

A philosophical argument as envisioned here is an inference based upon evidence. The full articulation of this inference consists of five steps, each step being a demonstration of different parts of the process by which a conclusion is reached. . .

Statement of the position

Citing the evidence

Invoking the general principle with an example

Subsuming the present case under the general rule

Statement of the position as proven thereby.

Example

There is fire on the hill.

For there is smoke there.

Wherever there is smoke there is fire, as in the kitchen.

There is smoke on that hill 'accordingly' (= tathā).

Therefore there is fire there (to be sure)."[97]

At a later date (11th century A.D.), the Nyāya school, compiled an elaborate 'proof' of God's existence. The world is a produced 'thing' and it requires a conscious, intelligent agent. A pot requires a potter to produce it. Also, the Vedas have an author, like any other

[97] Matilal, Perception, pp. 77 - 78.

book. And this author is God. This is in contrast to mīmāṃsakas who consider the Vedas as eternal, without any divine or human authorship.

Unlike Mīmāṃsā, Nyāya considers the validity of a cognition as dependent upon something other than the cognitive event itself (parataḥ pramāṇa). Since God created the world for some purpose (to fulfil our karmas), if we act on our cognition and it 'works,' then it provides a proof of the validity of our knowledge. Thus, Nyāya can be said to be pragmatic in its method of verification. In the classical example of mistaking a 'rope' to be a 'snake,' we err by ascribing 'universal snake-ness' to the 'rope.' [88]

The second of this pair (the fourth in the classification), is the Vaiśeṣika school. The earliest exposition of this school is found in Vaiśeṣika-Sūtra by Kaṇāda, whose date is considered to be about 200 B.C.[89] This school is closely identified with the Nyāya in commentarial literature though they originated separately and continued for quite some time in separation. Nyāya deals mainly with epistemology and accepts the ontology of Vaiśeṣika, which, in turn accepts the logic and epistemology of the former.

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[88] Raju, Structural Depths of Indian Thought p. 219.
[89] Matilal, Nyāya-Vaiśeṣika, p. 54.

The vaiśeṣikas, who were realists, considered everything in the world to be known under seven categories. These are (1) dravya (substance), (2) guṇa (quality), (3) karma (action), (4) sāmānya (universal), (5) viśeṣa (particular), (6) samavāya (inherence) and (7) abhāva (negation). "[In Vaiśeṣika] The ultimate constituents of the world never merge with one another, nor do they emerge from one common ground; they are irreducibly distinct. The emphasis on what is ultimately separate is, indeed, one of the associations of the name Vaiśeṣika."[100]

Substance is that which is a locus of qualities and which comes into the relation of contact. When two things are in contact, it is the substances and not the qualities that have come into contact. There are nine kinds of substances: earth, water, fire, air, space (ether), time, (directional) space, spirit (ātmā) and mind (manas). The first five elements are called bhūtas and they form the material world. The elements, except for space (ether), are constituted of atoms.

The reason the vaiśeṣikas put forward the theory of things being made up of atoms is as follows: Material objects, like stones, can be divided into smaller parts. So we know that large things are made up of smaller parts. Now, if we go on dividing a stone, at some

[100] Halbfass, On Being and What There Is, p. 49.

point the division must stop. If not, then a mountain and a mustard seed would both have an infinite number of divisible units. But this would lead to a peculiar situation, because we know that a mountain is larger than a mustard seed. Now, how can a similar number of smaller units be combined to produce two entities of different sizes? Of course, Vaiśeṣika had some difficulty in explaining how the atom, which is indivisible and has no size (since if it had size, it could be further divided), can form material things which we perceive.

The ātmā is all-pervading, eternal substance. There is not one single ātmā but multiple ātmā, and all are separate from each other and also from the god, who is a supreme ātmā. Mind is atomic in size. And it is by itself unconscious, but produces consciousness when it comes in contact with ātmā.

There are twenty-four 'qualities' or guṇas: color, taste, smell, touch; number, dimension, separateness, conjunction, disjunction, proximity, distance, cognition, pleasure, pain, desire, aversion, effort, gravity, liquidity, viscosity, disposition, merit and demerit, and sound. Both Nyāya and Vaiśesika subscribe to the doctrine of karma and rebirth, but unlike Sāṃkhya, they consider God essential in the karma equation.

The Nyāya-Vaiśeṣika schools' presentation of realistic, physicalistic, and analytical philosophical views have attracted a number of modern Western and Indian scholars.[101] To quote Potter, "Nyāya-Vaiśeṣika offers one of the most vigorous efforts at the construction of a substantialist, realist ontology that the world has ever seen. It provides an extended critique of event-ontology and idealist metaphysics." [102]

The third pair of schools is Sāṃkhya and Yoga. The former derives its name from the term saṃkhyā meaning 'number.' Sāṃkhya thus indicates a system which enumerates. The originator of Sāṃkhya is said to be Kapila whose date is probably earlier than that of Buddha.[103] One preeminent text in this school is Sāṃkhyakārika of Īśvarakṛṣṇa which dates from ca. 350-450 AD. However, there is ample evidence of the existence of the Sāṃkhya system in some form or other much earlier than the 4th century AD, for example, in the Upaniṣad literature of 200 - 600 BC. Of special interest to us here is the fact that there is evidence of some early Sāṃkhya in the medical text of Caraka-saṃhitā, as we shall see.[104]

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[101] Halbfass, On Being and What There Is, p. 81.
[102] Potter, Encyclopedia of Indian Philosophies: Nyāya-Vaiśeṣika p.1.
[103] Davies, The Sankhya Karika of Iswara Krishna, p. 2.
[104] Larson and Bhattacharya, Encyclopedia of Indian Philosophies: Sāṃkhya p. 15.

Sāṃkhya accepts three sources of knowledge just as Mīmāṃsā does, but is not as dependent upon the śabda pramāṇa, though it does accept its importance especially in relation to the authority of the Vedas. The three sources or pramāṇas are pratyakṣa (observation/perception), anumāna (inference), and śabda (word, verbal knowledge).

According to Sāṃkhya, the whole universe is an evolute of the prime matrix, prakṛti in the presence of pure consciousness puruṣa.

> Nature (Prakṛti), the root (of material forms), is not produced. The Great One (Matat=Buddhi of intellect) and the rest (which springs from it) are seven (substances), producing and produced. Sixteen are productions (only). Soul is neither producing or produced.[105]

The prime matrix prakṛti is undifferentiated material 'stuff' wherein three guṇas (threads) are in perfect balance. These three threads out of which the whole fabric of the universe is woven are sattva (pure, transparent), rajas (active), and tamas (inert, dark).

In the co-presence of puruṣa (pure consciousness), prakṛti (prime stuff) evolves into several evolutes. The first is buddhi

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[105] Davies, The Sankhya Karika , p. 9.
mūlaprakṛtiravikṛtirmahadādyāḥ prakṛtivikṛtiyaḥ sapta |
sodaśakastu vikāro na prakṛtirna vikṛtiḥ purusaḥ ||

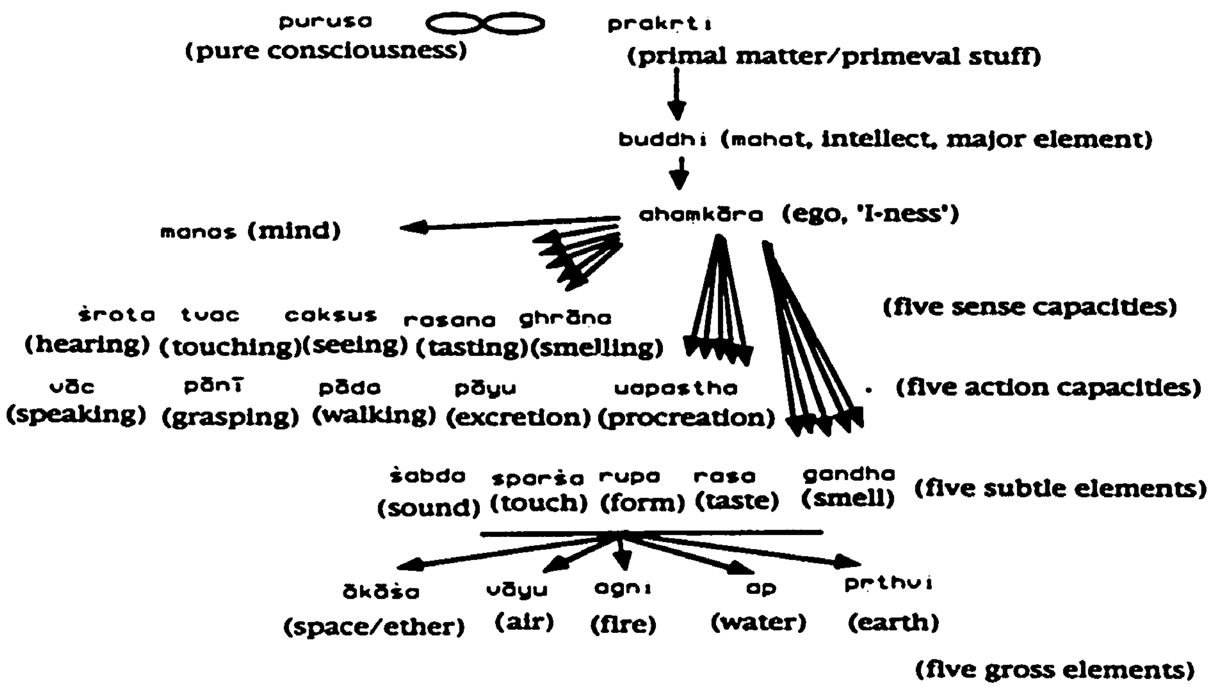
(intellect), out of which ahaṃkāra (ego) evolves. From ego, manas (mind), five sense capacities, five action capacities and five subtle elements are evolved. From the five subtle elements, five gross elements evolve. The subtle elements are not perceptible by the senses, whereas the gross elements make up the material things that are perceptible by the senses. Eighteen of the twenty evolutes form the 'subtle body' which transmigrates from one lifespan to the next, carrying with it the fruits of its karma. (Fig. 2)[106]

The intellect (buddhi) has eight fundamental predispositions (bhāva): towards meritorious behavior (dharma), towards knowledge (jñāna), towards nonattachment (vairāgya), towards power (aiśvarya), towards demeritorious behavior (adharma), towards ignorance (ajñāna), towards attachment (avairāgya), and towards impotency.[107] The predispositions are innate but can be modified through the cycle of birth-rebirth.

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[106] Figure, 2. p. 87.

[107] Larson and Bhattacharya, Sāṃkhya, p. 53.



(Fig. 2) Evolution of Prakṛti

Larson explains the relation of dispositions to the evolutes or elements as follows, using a computer and a linguistic metaphor:

> Regarding a computer metaphor, it might be suggested that the set of 25 basic principles is the 'hardware' of the Sāṃkhya system, whereas the set of 8 predispositions with the resultant trajectories represents the 'software' of the Sāṃkhya system. Or, using a metaphor from linguistics, it might be suggested that the set of 25 basic principles represents the deep structural 'syntactic' component of the Sāṃkhya system, whereas the set of 8 predispositions with the resultant trajectories represents the deep structural 'semantic' component of the Sāṃkhya system.[108]

The aim of Sāṃkhya is to relieve three kinds of pain. "There being (in this world) an impediment caused by the three kinds of pain, (there arises) a desire for inquiry into the means of alleviating them."[109] The three kinds of pain (duḥkha) are those arising from one's self (ādhyātmika), those arising from external entities (ādhibhautika) and those arising from the gods (ādhidaivika). The goal of Sāṃkhya is to gain true knowledge regarding prakṛti and to realize that the material intelligible world is made up of prime

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[108] Larson and Bhattacharya, Sāṃkhya, p. 54.

[109] Jha and Sharma, The Tattvakaumudi in Hulin, Sāṃkhya Literature, p. 143.

matter (three attribute-stuffs) along with the presence of pure consciousness. It is such knowledge that removes all duḥkha and releases one from the bondage of rebirth.

Finally, we come to Yoga which means to join. "Etymologically the word is derived from the root yuj, 'to link together,' 'to bind closely,' 'to harness,' 'to bring under the yoke,' and this root is also the source of the Latin *jungere* and *jugum* , the English *yoke* , etc."[110]

The date of Patanjali's aphorisms, Yoga-sūtra, is uncertain and is estimated to be somewhere from 200 B.C. to 400 A.D. Yoga differs from Mimāṃsā in that Yoga also recognizes extrasensory perception. Yoga accepts most of the metaphysical precepts of Sāṃkhya. However, while Sāṃkhya relies on reflective discernment to gain knowledge of the true nature of prakṛti and puruṣa which alleviates pain, Yoga relies on meditative exercises. As Feuerstein puts it, "In a nutshell, whereas Classical Sāṃkhya relies heavily on the power of ratiocination and discernment, Classical Yoga, like any other yogic tradition, is founded on a philosophy which encourages personal experimentation and direct 'mystical' verification."[111] Aim of Yoga is to alter the normal consciousness and achieve a state of samādhi which makes it possible "the autorevealation of the Self

[110] Eliade, Patanjali and Yoga, p. 9.
[111] Feuerstein, The Philosophy of Classical Yoga p. 113.

(puruṣa) thanks to an act that is not a constituent of an experience."[112] Yoga also considers isvara (Lord), God, as a requisite for achieving mokṣa, liberation.

The goal of our investigation here is to elucidate the relation between ancient Indian medicine and philosophy. And as mentioned earlier, because the ancient Indian medicine has aligned itself overtly with Veda, we have limited our examination to the so called 'orthodox' or vedic schools of philosophy. Thus, an inquiry into the reciprocal influences between Indian medicine and 'non-vedic' schools of Indian philosophy, though interesting, is outside the scope of our present endeavor.

The preceding review of the six schools of Indian philosophy is more in a manner of brief sketches than a full portrait or a sculpture. Its aim is to provide a bird's-eye view (vihanga avalokana), giving us some sense of the contours and connections of various schools. Since what a person does (his/her karma) and what we mean by a person (puruṣa, ātmā, 'self') influence both medicine and philosophy, we will examine next these two topics, karma and the 'Empirical Self.

[112] Eliade, Patanjali and Yoga, p. 93.

(4)

Karma

Karma is a term which has found its way into common currency in the English language from Indian literature. In general usage, it is understood as a person's actions determining his fate and, therefore, as his fate or destiny itself. One of the reasons for the integration of this term into the English lexicon could be that karma is quite ubiquitous in the field of Indian philosophy and literature. Any Western scholar, whatever his or her special interest in the field of Indian study, is likely to encounter karma doctrine in one form or another. Our interest in the doctrine of karma is based on the fact that if karma simply means unalterable 'fate' or 'destiny,' then a physician's task would become superfluous. Karma is widely accepted in Indian philosophy, while at the same time we know that there was a system of medicine available in ancient India which also dealt with the question of karma, as evidenced by Caraka-Saṃhitā and Suśrtuta-Saṃhitā. Hopefully, a better understanding of karma will illuminate certain aspects of philosophy as well as of medicine.

The word 'karma' comes from the root 'kṛ,' which means to do,

make, perform, accomplish, cause, prepare, or undertake. Karma, then, means an act, an action, or a performance.[113] The meaning of the term is thus deceptively simple. In a specialized, narrower sense, karma may refer to a religious ritual or a rite. In a wider sense, it would mean anything that is done, either mentally or physically. The sense of this word is enlarged to the utmost degree in Bhagavadgītā, where it is asserted that even when one refrains from doing something, one performs an act of restraining oneself.[114] In that sense, one acts from the moment of birth to the time of death.

There is considerable debate about the origin of the karma doctrine. Karma would be fully meaningful only if it is associated with a doctrine of rebirth. The vedic people, ārya, who are believed to have come to India from the Northwest, were initially in the Indus valley where the main crop was wheat. In the Ganges plains and in Southern India, the crop was rice. Obeyesekere offers a thesis that the 'rebirth theory' was found in the tribal regions of the Gangetic plains in the eastern part of ancient India.[115] Other writers, while discussing the origin of Greek philosophy, have pointed out the connection between the Greek philosophical outlook and the physical

[113] Monier-Williams, A Sanskrit-English Dictionary, pp. 258, 301.
[114] Tilak, Bhagavadgitārahasya, 3.5.
[115] Obeyesekere, Rebirth Eschatology and its transformation, in O'Flaherty, Karma, p.137-164.

environment of a rugged country, steep mountainsides, narrow valleys and bright sunlight.[116] The rebirth literature of India employs the metaphor of rice cultivation. "[I]t is easy to see why the karma theory would rise among the rice-growers rather than wheat-growers: rice is planted twice, first the seed and then the seedling that is replanted; rice is also harvested over and over in a year, rather than at a single harvest season; hence it is a natural symbol for rebirth."[117]

It is difficult to pinpoint precisely where, in ancient India, the theories of karma and rebirth originated and coalesced. However, in the vedic literature we find mention of karma in the sense of ritual/fire sacrifice ceremonies. There were detailed instructions for the performance of these rituals. The qualifications and number of participants, the design and construction of the altar, the text to be used and its precise utterance, the deities to be invoked and addressed - all of these matters and more were specified in the ritual vedic texts. Examination of these texts clearly indicates how important it was to have a correct and precise performance of the prescribed ritual in order to have success in obtaining desired objects, such as progeny, riches or cattle. Thus, karma and its result

[116] Wilbur and Allen, The Early Greek Philosophers, pp.2-4.
[117] O'Flaherty, Karma, p. xvii.

were seen as being very tightly linked in a cause-and-effect relationship.

Tull proposes a plausible explanation to the effect that the theory of karma may have had its origin as an essential ingredient in the calculus of a ritual performance.[118] The ritual performance was multifaceted. One of the aims was to re-enact the original act of 'primal puruṣa' which sacrificed 'itself' and out of it made the whole universe. By re-enacting that act of sacrifice, the ritual performer continues and rejuvenates the universe. Moreover, by using other substances or animals to represent himself, the ritual performer obviates his own demise prior to his death.

Conversely, upon his own demise and his body's ultimate consumption in fire, all of the elements which make up a person will return to the elements of the world. Also, by strictly delimiting the altar site, one confines one's sacrificial dissolution within the carefully prepared narrow boundaries of the altar and keeps the outside world undisturbed. However, the rewards were expected to accrue within the larger world. As Tull concludes, from the narrow field of a ritual, the concept of act and its corresponding reward seems to have evolved to include all human acts.

[118] Tull, The Vedic Origins of Karma, pp. 12-43.

One of the earliest mentions of the term karma occurs in Bṛhdāraṇyaka Upaniṣad, an ancient treatise of the seventh or eighth century B.C.[119] The sage Yājnavalkya is engaged in a discussion about the mysteries of life. One of the dialogues goes as follows:

> "Yājnavalkya," said he [Artabhāga] "[upon death] when the speech (voice) of this dead person enters into fire, the breath into air, the eye into the sun, the mind into the moon, hearing into the quarters, the self into the ether, the hairs of the body into the herbs, the hairs on the head into the trees and the blood and the semen are deposited in water, what then becomes of this person?" "Artabhāga, my dear, take my hand. We two alone shall know of this, this is not for us two (to speak of) in public." The two went away and deliberated. What they said was karman and what they praised was karman. Verily, one becomes good by good action, bad by bad action. [120]

In the universe of Indian philosophy karma occupies a position which is well established, yet not always precisely located. Almost all the branches of Indian philosophy accept the karma doctrine. Dasgupta says, "All the Indian systems agree in believing that

[119] Radhakrishnan, The Principal Upanisads, p. 22.
[120] Radhakrishnan, The Principal Upanisads, p. 217.

whatever action is done by an individual leaves behind it some sort of potency which has the power to ordain for him joy or sorrow in the future according as it is good or bad."[121] The one exception to the general acceptance of the karma doctrine was the materialists or the Cārvaka doctrine which believed in the pleasure principle. For this view the yardstick for evaluating the worth of any activity was its capacity to provide 'pleasure' or 'happiness.' Except for the Cārvaka school, one encounters the karma doctrine in all schools of Indian philosophy.

When we move from the literal meaning of the word karma to its meaning as a philosophical doctrine, as used explicitly by philosophers or as accepted in the indigenous culture as a term of common usage, we see that the meaning goes beyond a mere act. Karma may mean not only an act, but 'an act' and 'its fruits' and the linkage between the two.

In the natural world, it is accepted that any effect has a cause preceding it. Such a cause-and-effect theorem is encompassed in the karma doctrine, but still karma means more as well as less than the natural law of cause-and-effect. It means 'more' because karma means good action leads to good results and bad actions to bad

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[121] Dasgupta, A History of Indian Philosophy vol. 1, p. 71.

results. In other words, karma involves a moral calculus. If karma is understood only as a 'ritual action', then it would mean a special and restrictive application of the natural law of cause-and-effect.

For example, a stone which is thrown with a certain force will land at a certain distance, according to the laws of physics. When the same act of stone throwing is viewed from the vantage point of karma, we want to know who threw the stone and towards whom and for what purpose. A stone thrown will be interpreted differently if it was thrown to hurt someone or to wake him up to alert him about some anticipated danger. In either instance, the physical injury could be similar, but the former would be a bad act while the latter would be considered good.

Moreover, from the point of view of physical science, the result or 'fruit' of the act is a stone striking someone and the resulting impact with a certain force. From the karmic point of view, 'the result' or 'the fruit' of action we are studying is not the impact of the stone where it lands, but the 'fruit' that is acquired by the thrower of the stone. In other words, in karma, the result recoils on the actor. Not only that, but 'the act'--albeit passive--of receiving the impact of the stone by an individual also has to be accounted for in the light of that individual's previous acts. Thus, karma is 'actor specific.' One

reaps what one sows. It is this moral dimension that differentiates karmic action from other cause-and-effect chains observed in the natural world.

One more point about the 'stone throwing' incident: the impact of the stone is an immediate event. The temporal sequence between the cause and effect is proximate. The 'fruit' that accrues to the stone thrower (or for that matter, the 'fruit' experienced by the stone receiver) can also be separated by a short- or long-time interval. If the fruits are not experienced now, they will be experienced later on, if not in this life, then in a subsequent life or lives. Without the doctrine of rebirth, karma doctrine would not be complete or intelligible. That is why the karma doctrine is inextricably intertwined with the doctrine of rebirth and reincarnation. One sees people in happy or miserable circumstances in this life, without any evidence of corresponding causes to account for them. In such instances, it is supposedly the karma of a previous life that would provide the explanation for such circumstances.

Karma doctrine as a law of cause and effect raises some further questions. If one's action invites a commensurate fruit, then it follows that whatever situation one finds oneself in can be interpreted as a just reward of some past karma. So formulated,

karma doctrine may seem to dictate fatalism. Many commentators have laid such a charge against the law of karma. A. B. Keith, for example, states:

> The conception of Karman serves indeed in an excellent way to defend and protect the established order of things, but it is essentially fatalistic; and fatalism is not for a normal mind a good incentive to moral progress. If, on the one hand, the doing of an evil deed is restrained by the thought that it will be punished in another life, it is equally true that reflection shows that the actor has really no option in his act and is an absolutely predetermined person whose former acts produce his present motive and reasoning without the possibility of intervention of any kind on his part.[122]

Though such an argument may seem plausible or attractive, fatalism need not be accepted as a corollary to the doctrine of karma. On the contrary, it can be argued that because karma links an individual to his/her previous action, the karma doctrine recognizes objective criteria of 'good' and 'bad' actions. If this were not so, then the fruits of one's acts would be haphazard without having to follow any law.

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[122] Keith, The Religion and Philosophy of the Vedas and Upanisads, pt. 1, p. 232.

Even if it is true that one's current situation is the result of one's past action, one still has a freedom, nay, an obligation to oneself, to act and influence the current and future state of affairs. This is the aspect of karma which the argument about fatalism seems to ignore.

There is another challenge that the operation of the law of karma has to meet. It is relatively easy to explain the connection between an act and its result when the act is proximate to the fruits of that action. For example, one may be so engrossed in an act of hurting someone with a stone that, while aiming the missile, he may fail to notice a hole in the ground and fall in it. Many would say that the attacker got what he deserved. But, as we expand the time interval between the act and its fruits, it becomes increasingly difficult to link act and result in a cause-and-effect relationship. It is hard to explain how an action performed in a previous lifetime, perhaps many a lifespan ago, can have influence on something happening here and now.

Reichenbach offers an explanation about the operation of karma that classifies the results of acts into two kinds: "[those w]hich we might term phalas [fruits] and saṃskāras [dispositions]. Phalas include all the immediate effects, visible and invisible, which

actions produce or bring about. They are often referred to as the fruits or results of an action. Saṃskāras are the invisible dispositions or tendencies to act, think, experience, or interpret experiences in ways which are conducive to one's happiness or unhappiness, produced in the agent as a result of the action. They constitute, in effect, special modifications of the agent."[123]

We may note in passing that saṃskāras could be seen as similar to what are called habits in Aristotelian philosophy.

Coward, in a similar mode, describes karma as producing saṃskāras that are memory tracings. Coward compares the saṃskāras produced by one's actions to the psychological explanations provided by Freud and Jung:

> Sufficient repetitions of the same action or thought produce a strengthening of the predisposition (saṃskāra), and the establishing of a "habit pattern" or vāsanā. Such a karmic habit pattern or vāsanā is the Yoga equivalent for the modern psychological notion of motivation. The unconscious, in Yoga terminology, is nothing more than the sum total of all stored-up karmic traces from the thoughts and actions done in this and previous lives.[124]

[123] Reichenbach, The Law of Karma p. 25

[124] Coward, Psychology and Karma, in Phil. East West, 33, 1983, p. 49.

The interpretation of the karmic results as changes occurring in a subject still poses two problems that need explanation. First, this effect has to be understood as transported from one life cycle to the next, including even births in different species. It can be explained in terms of certain characteristics that are transmitted from one birth to another, but with the following difference. In contrast to genetic transmission where the characteristics of the offspring are derived from the parents' genetic code, the offspring, according to karmic transmission, is itself responsible for the predispositions inherited from an earlier life.

Second, the karmic effect on the environment needs to be explained. Suppose someone becomes ill in an epidemic of plague. The mechanism by which a person's karma in a previous life affects him in an adverse way in this life, making him a patient suffering from an epidemic disease, is an important point to be considered. One explanation could be that karma creates certain tendencies in a person which persist across the boundaries of different life cycles. It is this tendency which makes that person *re-act* in such a way as to make him prone to a particular disease.

The doctrine of karma also raises another ancillary problem. If the karma operates as a law, then an appropriate effect follows a

related cause for a particular individual, with the understanding that the effect will certainly follow even if takes several births in different species to accomplish that. To have an exact moral calculus administered on the basis of a natural law may seem a daunting task, especially when one considers that such 'just deserts' have to be meted out across the boundaries of different births and diverse species. One solution would be to posit God as the One who keeps track of the fruits to be meted out to the individual actors. This method of karmic operation would have God administer karmic justice.

The question is, "Does God administer justice strictly according to the law of karma? or, can God grant a boon, a favor to someone who is a devotee of God?" If God cannot grant any favor, then the importance of God, or of divine grace, becomes questionable. If God is omnipotent, then He can do anything. In that case, of course, He can forgive one's transgression and relieve that individual from receiving his earned rewards. However, in that case, the law of karma becomes merely a rule to be followed or ignored by God as He sees fit. On the other hand, if the law of karma is held to be inviolable, then God becomes merely an administrator of the law of karma and is no longer an omnipotent being.

One way out of this dilemma could be that God's grace is not to be understood as unearned merit. Merit can be earned only with good acts of one's own. God's grace comes only to someone who has devoted himself to God with pure desire. It is one's purity and preparation which make one eligible, as it were, to receive God's grace. Another solution to the dilemma would be to consider God's grace as a generally available gift, like 'sunshine' or 'rain,' with this difference: it is only karmically meritorious persons who are aware of and inclined to utilize this grace.[125]

In Caraka-Saṃhitā, one of the pupils poses a question to the teacher Ātreya about the efficacy and even the necessity of any treatment. Some patients, even with proper care and precautions, die, and some survive. Some patients recover without proper attendance or treatment. Treatment seems to be akin to adding a few drops of water to a lake or a river.

If such is the case, what good does a therapeutic intervention do for the patient? Implied in such a question is the fact that if a patient's previous karma is the factor which determines the outcome of an illness, and thus is responsible for a favorable or an unfavorable result, then any therapeutic intervention becomes a

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[125] Reichenbach, The Law of Karma, pp. 79 - 100.

mere formality. The physician's function, then, becomes superfluous.[126] If it is true that 'whatever will be will be,' therapy is useless, expensive and possibly a harmful enterprise, since it might be contrary to a patient's karma. This difficulty is similar to that about fatalism.

Punarvasu Ātreya, the teacher, replies that treatment is not necessarily useless.[127] As a strong person who has fallen down will be able to get up with little or no help, so also a patient with a strong constitution will be able to recover from his illness with little or no therapeutic intervention. On the other hand, a weakened patient may not recover in spite of appropriate therapeutic intervention. Thus, any implication of an inevitable or predetermined outcome of an illness (along with an implied fatalistic belief in karma

[126] CS. 1. 10. 3.
catuṣpādaṃ ṣoḍaśakalaṃ bheṣajamiti bhiṣajo bhāṣante
yaduktaṃ pūrvādhyāye ṣoḍaśaguṇamiti
tadbheṣajaṃ yuktiyuktamalamārogyāyeti bhagavān punarvasurātreyaḥ||

[127] CS. 1. 10. 4.
neti maitreyaḥ kiṃ kāraṇaṃ
dṛśyante hyāturāḥ kecidupakaraṇavantaśca
paricārakasaṃpannāścātmavantaśca kuśalaiśca bhiṣagbhiranuṣṭitāḥ
samuttiṣṭamānāḥ tathāyuktāścāpare mriyamāṇāḥ
tasmādbheṣajamakiṃcitkaraṃ bhavati
tadyathā ṣvabhre sarasi ca prasiktamalpamudakaṃ nadyāṃ vā
syandamānāyāṃ pāṃsudhāne vā pāṃsumuṣṭiḥ prakīrṇa itiḥ
tathā'pare dṛśyante'nupakaraṇāścānātmavantaścākuśalaiśca
bhiṣagbhiranuṣṭitāḥ samuttiṣṭamānāḥ tathāyuktā mriyamāṇāścāpare |
yataśca pratikurvan sidhyati pratikurvan mriyate apratikurvan
sidhyati apratikurvan mriyate tataścintyate
bheṣajamabheṣajenāviśiṣ'amiti ||

consequences) is denied.

According to Caraka, causes of misery or illness are not the senses, nor the sense objects by themselves. The causes of the discomfort/pain are fourfold, according to how the senses join with their objects, whether such a joining is *appropriate*, *wrong*, *excessive* or *absent*.[128] But this classification is part of a larger picture of the origin of discomfort/pain. Deprivation of intellect, patience and memory, maturing of karma over a period of time, and imbalance of contact with objects of the senses are causes of discomfort. When one performs a bad action due to deterioration of intellect, patience and memory, that is known as an error of cognition, aggravating all the doṣas, defective humors.[129]

Caraka takes a position that is not fatalistic in its outlook. This becomes clear when one examines the definition of daiva ('pertaining to gods', fate) given by Caraka. By daiva (fate) is meant the karma of the previous embodied life. After a passage of time,

[128] CS. 4. 1. 30 - 31.
nendriyāṇi na caivārthāḥ sukhaduḥkhasya hetavaḥ |
hetustu sukhaduḥkhasya yogo dṛṣṭaścaturvidhaḥ ||
santīndriyāṇi santyarthā yogo na ca na cāsti ruk |
na sukhaṃ kāraṇaṃ tasmādyogo eva caturvidhaḥ ||

[129] CS. 4. 1. 98 - 102.
dhīdhṛtismṛtivibhraśaḥ samprāptiḥ kālakarmaṇām |
asātmyārthāgamaśceti jñātavyā dukhahetavaḥ ||
dhīdhṛtismṛtivibhrastaḥ karma yat kurite'śubham |
prajñāparādhaṃ taṃ vidyāt sarvadoṣaprakopaṇaṃ ||

karmas--which have accumulated harmful 'fruits'--may cause disease.[130] This is how the maturing karma over a period of time causes suffering. In another place, Caraka mentions that whatever actions that are done in previous life are called daiva (fate) and what is done in this life is called karma. Karmas of both this and the previous births determine the lifespan of an individual.[131] The body's eventual demise is also expressed using a physical metaphor wherein the body is compared to a vehicle.[132] One with a good axle, driven on

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[130] CS. 4. 1. 116 - 117.
nirdiṣṭaṃ daivaśabdena karma yat paurvadehikam |
hetustadapi kālena rogāṇāmupalabhyate ||
na hi karma mahat kiṅcit phalaṃ yasya na bhujyate |
kriyāghnāḥ karmajā rogāḥ praśamaṃ yānti tatkṣayāt ||

[131] CS. 3. 3. 29 - 30.
ihāgniveśa bhūtānāmāyuryuktimapekṣate |
daive puruṣakāre ca sthitaṃ hyasya balābalam ||
daivamātmakṛtaṃ vidyāt karma yat paurvadaihikam |
smṛtaḥ puruṣakārastu kriyate yadihāparam ||

[132] CS. 3. 3. 37 - 38.
ataḥ paramagniveśa uvāca evaṃ satyaniyatakālapramāṇāyuṣāṃ bhagavan|
kathaṃ kālamṛtyurakālamṛtyurvā bhavatīti ||
tamuvāca bhagavānāreya śruyatāmagniveśa
yathā yānasamāyukto'kṣaḥ prakṛtyaivākṣaguṇairupetaḥ sa ca sarvaguṇopapanno vāhyamāno yathākālaṃ svapramāṇakṣayādevāvasānaṃ gacchet tathā''yuḥ śarīropagataṃ balavatprakṛtyā yathāvadupacaryamāṇaṃ svapramāṇakṣayādevāvasānaṃ gacchati sa mṛtyu kāle |
yathā ca sa evākṣo'tibhārādhiṣṭitatvādviṣamapathādapathādakṣa-cakrabhaṅgādvāhyavāhakadoṣādaṇimokṣādanupāṅgāt paryasanāccāntarā'vasānamāpadyate tathā'yurpyayathā balamārambhādayathāgnyabhyavaharaṇādviṣamābhyavaharaṇādviṣama-śarīranyānādatimaithunādasatsaṃśrayādudīrṇavega-vinigrahādvidhāryavegāvidhāraṇā-dbhūtaviṣavāyvagnyupatāpādavighātādāhāra-pratīkāravivarjanāccāntarā'-vasānamāpadyate sa mṛtyurakāle tathā jvarādīnapyātaṅkānmithyopacaritānakālamṛtyun paśyām iti ||

a smooth road and taken good care of, will last till it naturally wears down. A body thus naturally worn down meets a natural death.

Caraka, in various contexts and formulations, always emphasizes the ability of an individual, be it a physician or a patient, to affect the course of his/her illness whether it is caused by actions performed in this life or in a past life. Even the length of life can be explained and influenced by the individual's own actions in this life, which includes taking action in the face of an illness.

(5)

The Empirical Self

Caraka addresses some questions about what constitutes a 'self,' a person, in a chapter called Śārirasthāna. The term used to start the discussion is puruṣa. Punarvasu, the teacher, is asked by his pupil, Agniveśa, a series of questions.

> How is puruṣa (the individual self, the embodied self, the empirical self) to be analyzed with reference to the analysis of the elements?
>
> Why is puruṣa thought to be a causative agent? What is the origin of puruṣa? Why is it seen as a knowing self, not-knowing self or eternal or ephemeral? What is its nature?
>
> What is its mode of change? What is its mark of recognition? It is thought to be 'inactive' and 'independent.' If so, what could be the action of this 'inactive entity'?[133]

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[133] CS. 4. 1. 3 - 4.

katidhā puruṣo dhīman dhātubhedena bhidyate |
puruṣaḥ kāraṇam kasmāt prabhavaḥ puruṣasya kā ||
kimajño jñaḥ sa nityaḥ kim kimanityonidarśitaḥ |
prakṛtiḥ kā vikārāḥ ke kim liṅgam puruṣasya ca ||

If independent, then why does it take birth in different species (high or low)? If it is completely self-controlled, why is it overpowered by miserable ideas?[134]

Which comes first, the field or the knower of the field? -- that is the troubling doubt. Without a knowable field, there cannot be a knower of the field. On the other hand, if the field is to be given priority, then the knower of the field becomes non-eternal.

If puruṣa is considered 'a witness' only, then, since none else is known to be, who else is the doer of deeds? The pain of the past is gone, the pain of the future is yet to be, and even the present time is momentary. Under these circumstances, how is one to treat those in distress who seek help? What is the cause of distress? What is the location of distress?

[134] CS. 4. 1. 5 - 7.
niṣkriyaṃ ca svatantraṃ ca vaśinaṃ sarvagaṃ vibhum |
vadantyātmānamātmajñāḥ kṣetrajñaṃ sākṣiṇaṃ tathā ||
niṣkriyasya kriyā tasya bhagavan vidyate katham |
svatantraścedaniṣṭāsu kathaṃ yoniṣu jāyate ||
vaśi yadyasukhaiḥ kasmādbhāvairākramyate balāt |
sarvāḥ sarvagatatvācca vedanāḥ kiṃ na vetti saḥ ||

The 'existent-self' (bhutātmā, the embodied self, the self in association with the elements which make up an individual, the empirical self) is all-knowing, all-renouncing, retired from all contacts, quiescent and singular. What are the characteristics by which one can recognize this self (ātmā)?[135]

It is instructive to note that Caraka opens a chapter, which is titled śārīrasthāna (a chapter about an entity that is related to body), with such a series of questions about 'puruṣa.' Instead of a description of the structure and function of the human body initiating the discussion in such a chapter, we are plunged into detailed discussion about 'knower' and 'known,' 'field' and 'field-knower,' 'self, eternal or ephemeral.' The question of 'body' is addressed in relation to the 'self,' or 'soul' in the sense that the 'self,'

[135] CS. 4. 1. 8 - 14.

na paśyati vibhuḥ kasmācchailakudyatirskṛtam |
kṣetrajnaḥ kṣetramathavā kiṃ pūrvamiti saṃśayaḥ ||
jṅeyaṃ kṣetraṃ vinā pūrvaṃ kṣetrajṅo hi na yujyate |
kṣetraṃ ca yadi pūrvaṃ syāt kṣetrajṅaḥ syādaśāṣvataḥ ||
sākṣibhūtaṣca kasyāyaṃ kartā hyanyo na vidyate |
syāt kathaṃ sacāvikārasya viśeṣo vedanākṛtaḥ ||
atha cārtasya bhagavanstisṛṇā kāṃ cikitsati |
atītāṃ vedanā vaidyo vartamānāṃ bhaviṣyatīm ||
bhaviṣyantyā asaṃprāptiratītāyā anāgamaḥ |
sāṃpratikyā api sthānaṃ nāstyarteḥ saṃśayo hyataḥ ||
kāraṇaṃ vedanānāṃ kiṃ kimadhiṣṭhānamucyate |
kva caitā vedanāḥ sarvā nivṛtiṃ yāntyaśeṣataḥ ||
sarvavit sarvasanyāsī sarvasaṃyoganiḥsṛtaḥ |
ekaḥ praśānto bhūtātmā kairliṅgairupalabyate ||

or 'spirit,' ātmā, is the knower of the field and the body is the field that is known by ātmā.

There are essentially two senses in which the term 'puruṣa' is used in Indian literature. One is in the sense of what we in the Western philosophical tradition would call a person. This is an individual, a unitary being, someone healthy or ill, a patient or a physician. Puruṣa in ordinary usage simply can mean 'man.'

The other sense is peculiarly Indian. Traditional etymology gives the meaning of puruṣa as 'one who sleeps in the body, the spirit who dwells in the body.' A somewhat different meaning is obtained in the creation myth of the Veda. It is said that the universe was created out of the body of the 'primal puruṣa,' 'the universal being.' In that case, 'puruṣa' would be not only an instrumental cause of creation, but also a material and an efficient cause as well.

In the Yoga school of philosophy various metaphors are used to denote puruṣa. It is described as draṣṭṛ, the observer; svāmi, the lord; cit, the cognizer; and para, the other [than prakṛti].[136] However, in spite of acquiring various connotations of meaning over centuries of philosophical discourse, the term puruṣa has retained a

[136] Feuerstein, The Philosophy of Classical Yoga, p. 18.

core meaning which is largely related to the interpretation given to it in the Sāṃkhya system of philosophy.

According to Sāṃkhya philosophy, everything (the whole world) is made up of, and evolved out of, prakṛti, 'Nature.' This prakṛti, 'Nature' or 'prime matrix'--out of which everything is evolved--consists of three attributes or guṇas. These three guṇas are sattva (transparent, pure), rajas (bright, active), and tamas (dark, inert). In the beginning prakṛti is quiescent with its three guṇas in perfect harmony or balance. It is the disturbance in the three attributes which starts the process of evolution of the world out of the 'primal matrix,' prakṛti, which is described as one, eternal, indestructible and pervasive. The mechanism that disturbs the three well-balanced attributes, guṇas, in the beginning to start the process of evolution is not as clear as one would like it to be. It is explained that puruṣa is a witness whose sheer presence causes the prakṛti to evolve.[137] According to Sāṃkhya texts, the development is from the unmanifest, amorphous, undifferentiated mass to increasingly differentiated entities. (Fig. 2).[138] Hulin discribes it as follows:

The first evolute is the buddhi (sometimes called mahat)

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[137] Radhakrishnan and Moore, A Sourcebook in Indian Philosophy, pp. 424 - 452.

[138] Figure 2, p. 87.

which in its turn, gives birth to the ahaṃkāra (ego). Then, the evolution process branches off into two directions, according to the prevalence of the sattva or of the tamas in the ego (the rajas being active in both cases). The predominantly sāttvic ego (called vaikṛta) gives birth to the five organs of sense, the five organs of action (speech, hands, feet, organs of excretion and of generation), and the manas, which is both sensitive and active. The predominantly tamasic ego (bhūtādi) gives birth to the five tanmātras or "subtle elements" (sound, touch, form, taste, and smell), from which the five gross elements (respectively ether, air, fire, water, and earth) proceed.[139]

Agniveśa's questions about puruṣa invite a discussion by Punarvasu about what puruṣa is and is not. Punarvasu, the teacher, says that puruṣa is variously signified. Puruṣa is five elements (space, fire, water, wind, earth) and the consciousness. Even the consciousness alone is known as puruṣa. On the other hand, puruṣa is known by the twenty-four evolutes of the primal stuff. The twenty-four elements are manas (mind), ten indriyas (senses), five objects of senses, and Prakṛti's (primordial matrix of nature's)

[139] Hulin, Sāṃkhya Literature p. 149.

other eight evolutes (five elements in subtle form, ahaṃkāra or 'I-ness,' mahat (buddhi) or 'intellect,' and avyakta, 'unmanifest').[140]

Once we accept the presence of an entity such as 'ātmā,' soul, its relation to the vicissitudes of daily life poses certain problems. If one recognizes ātmā as eternal, constant, unchanging, a mere witness to the world full of misery, then one is faced with a problem of finding another active subject who acts and receives the fruits of actions. On the other hand, if one allows the possibility of ātmā being an agent, then one is faced with the question of assigning all the rewards and miseries of the mundane world to ātmā. This latter role is difficult to subscribe to if one is to maintain at the same time that ātmā is eternal and unchanging.

Caraka proposes that such a puruṣa in a primal state, when not associated with primal materiality, is a pure state of consciousness. But in the evolution of primal materiality, there is a presence of puruṣa which makes this evolution possible, though puruṣa itself does not contribute materially to the evolutionary products. However, as puruṣa is pure consciousness, it is the presence of

[140] CS. 4. 1. 16 - 17.
khādayaścetanāṣaṣṭhā dhātavaḥ puruṣaḥ smṛtaḥ |
cetanādhāturapyekaḥ smṛtaḥ puruṣasaṃjñakaḥ ||
punaśca dhātubhedena caturviṃśatikaḥ smṛtaḥ |
mano daśendriyāṇyarthāḥ prakṛtiścāṣṭadhātukī ||

puruṣa which makes it possible for the materially evolved things to be conscious. Awareness of 'something' is a function of evolutes from prakṛti, but only because there is a pure consciousness of puruṣa embodied in an individual. If puruṣa, which is pure consciousness, is absent, then no particular awareness of anything can take place.

This is said from the viewpoint of an individual. Therefore, without puruṣa there won't be any clarity or darkness, veracity or falsity, good or bad actions, a knower or a doer of deeds. If there is no puruṣa, there would be no shelter, no happiness, no distress, no movement, no nonmovement, no speech, no science, no treatise (scriptural or other), no birth and no death. If puruṣa does not exist, then there cannot be a bondage or a liberation. Without awareness there cannot be an agent; without an agent, no responsibility; without responsibility, no fault.

Caraka proposes the following examples from our daily experience. Can a pot be created if there be only earth, a rod for the wheel, and the potter's wheel but without a potter? Can a house be built with only earth, straw and wood but without a builder? Only ignorant individuals will make affirmative answers to these questions. A mere conglomeration of the elements cannot constitute the individual person in the absence of puruṣa. Physical entities

come and go, change, get damaged or destroyed, but there has to be a permanent entity which remains unchanged and constant. Otherwise fruits of the actions done by one will be awarded to someone else.[141]

Further, except for 'the unmanifest,' avyakta, everything is the field. And the unmanifest is known as the knower of the field.[142] Some of the proofs offered for the existence of puruṣa, 'self,' are as follows: Acts of inspiration and expiration, blinking of the eyes, life, mind's motion, movement from one sense organ to another, ability to hold on and move on, desire, envy, happiness, misery, effort, consciousness, steadfastness, intellect, memory, ego. These are the identifying marks of the supreme ātmā .

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[141] CS. 4. 1. 39-44, 48.
bhāstamaḥ satyamanṛtam vedāḥ karmam śubhāśubham |
na syuḥ kartā ca boddhā ca puruṣo na bhavedyadi ||
nāśrayo na sukham nārtirna gatirnāgatirna vāk |
na vijñānam na śāstrāṇi na janma maraṇam na ca ||
na bandho na mokṣaḥ syāt purugso na bhavedyadi |
kāraṇam puruṣastasmāt kāraṇajñairudāhṛtaḥ ||
na cet kāraṇamātmā syādbhādayaḥ syurahetukāḥ |
na caiṣu sambhaveja jñānam na ca taiḥ syāt prayojanam ||
kṛtam mṛddaṇḍacakraiśca kumbhakārādyate ghaṭam |
kṛtam mṛttṛṇakāṣṭhaiśca gṛhakārādvinā ghaṭam ||
yo vadet sa vadeddeham sambhūya karaṇaiḥ kṛtam |
vinā kartāramajñanādyuktyāgamabahiṣkṛtaḥ ||

tegsāmanyaiḥ kṛtasyñye bhāvā bhāvairnavāḥ phalam |
bhuñjate sadṛśāḥ prāptam yairātmā nopadiśyate ||

[142] CS. 4. 1. 65.
iti kṣetram samuddiṣṭam sarvanavyaktavarjitam |
avyaktamasya kṣetrasya kṣetrajñamṛṣayo viduḥ ||

When ātmā departs, the body becomes an empty dwelling.[143]

Caraka's discussion here centers around two important points: first, whether there exists an entity above and apart from a mind-body complex? The answer to this question in Caraka is in the affirmative. It is this entity that is called puruṣa, ātmā, spirit, soul, the self. This puruṣa, when present in the body, becomes an actor of acts and receiver of the fruits of such actions. This is in contrast with the Buddhist way, wherein the doctrine of 'spirit' or 'soul' is rejected or at least not postulated. In Buddhism, change is an automatic part of reality; results follow from causes preceding them. As one author has described, "The Buddhist way was to say there is no real subject, no real 'I.' There is only a conglomerate of five aggregates, each element of which is pushing ahead on its own, but which jointly falsely create a sense of unity that plays the role of the subject." [144]

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[143] CS. 4. 1. 70 - 74.

prāṇāpānau nimeṣādyā jīvanaṃ manaso gatiḥ |
indriyāntarasaṃcāraḥ preraṇaṃ dhāraṇaṃ ca yat ||
deśāntaragatiḥ svapne pañcatvagrahaṇaṃ tathā |
dṛṣṭasya dakṣiṇenākṣṇā savyenāvagamastathā ||
icchā dveṣaḥ sukhaṃ duḥkhaṃ prayatnaścetanā dhṛtiḥ |
buddhiḥ smṛtirahaṃkāro liṅgāni paramātmanaḥ ||
yasmāt samupalabhyante liṅgānyetāni jīvataḥ |
na mṛtasyātmaliṅgāni tasmādāhurmaharṣayaḥ ||
śarīraṃ hi gate tasmin śūnyāgāramacetanam ||

[144] Matilal, Nyāya Critique of the Buddhist Doctrine of Non-Soul p. 68.

Second, everything is said to be evolved from prakṛti, the primal material nature. Caraka presents a philosophical view that considers the mind and body not as opposing dualities but as evolved from a single source of prakṛti, the primal stuff.

Caraka provides an explanation of how such an evolution comes to form a human being. In one section of the chapter śārīrasthāna, the pupils of Ātreya and other scholars discuss the formation of an embryo (garbha).[145] Granting that ultimately everything is made up of the five principal elements, that still does not explain how the fetus comes into being. How do the five elements coalesce and channel into a new entity called an 'embryo'?

Some of the discussants state that it is the mother who is the originating cause of the embryo. Others disagree, saying that it is the father and not the mother who is the originating cause of the embryo. Still others propose wholesomeness, soul, mind or the juices/saps/tastes as the originating cause of the embryo.

However, acceptance of any one of these factors as a cause in isolation poses certain difficulties. For example, if we accept mother

[145] CS. 4. 3. 3.
... mātṛjaścāyaṃ garbhaḥ pitṛjaścātmajaśca sātmyajaśca rasajaśca asti ca khalu satvamaupapādukamiti hovāca bhagavānātreya ||

and father as the sole originating cause for the formation of the embryo, then there should be no reason why all the adults who desire children would not become parents. No couple who desired a child would remain childless. The mere fact of cohabitation might be enough to bring forth conception. As a matter of fact, this does not always happen. Further, if the parents were the sole originating cause, they would be able to choose a son or a daughter as their offspring. Such control by the parents over the outcome of intercourse is even less likely than their control over conception itself.

If the soul is the exclusive generative-cause of the embryo, then a question arises, "Why should soul not choose the best of family for its birth?" Besides, the soul is said to be unborn. If so, how can an unborn entity be the cause of a new birth? And if the soul is already born, then for it as an already existing entity, there cannot be another birth of the same entity.

What about wholesomeness of elements? By itself, it cannot be the cause of the embryo. Otherwise, anyone could follow a wholesome regimen and beget progeny. Moreover, those who follow unwholesomeness could never have children.

But such is not the case as we observe in the world. People who follow an unwholesome regimen often become parents.

If the 'juices/saps/tastes' were to be taken as the progenitors of an embryo, then we would have to say that everyone can become a parent, because everyone has 'juices/saps/tastes' as part of one's constitution. If by juice/sap/taste we mean only excellent 'juice/sap/taste,' then only certain individuals who take in excellent 'juice/sap/taste' would become parents. This is refuted by the common observation that there are people who do not partake of the best juices/saps/tastes and yet do become parents.

Ātreya, the teacher, resolves this dispute by answering that there are, or indeed have to be, five originating causes for the formation of an embryo. Thus, the embryo is originated due to the combination of these five factors: mother and father, soul, wholesome and well-balanced constituents, 'juices/saps/tastes,' and mind.[146] As a cottage is made from a collection of various substances and a

[146] CS. 4. 3. 5, 14.
neti bhagavānātreyaḥ sarvebhya ebhyo bhāvebhyaḥ samuditebhyo garbho'bhinirvartate ||

evamayaṃ nānāvidhānādeṣāṃ garbhakarāṇāgm bhāvānāṃ
samudāyādabhinirvartate garbhaḥ
yathā kūtāgāraṃ nānādravyasamudāyāt
yathā vā rathau nānārathāṅgasamudāyāt tasmādetadavocāma
mātṛjaścāyaṃ garbhaḥ pitṛjaśca ātmajaśca sātmyajaśca rasajaśca asti ca
satvamaupapādukamaiti [hovāca bhagavānātreyaḥ] ||

chariot is made from the coming together of various chariot parts, so is an embryo formed by a combination of the five factors. Conversely, these would not be formed at all if any one of the five factors were absent.

Thus, in this world a human being manifests itself through the proximate event of a coming together of five factors: mother and father, wholesome constituents, [life] juices/saps/tastes, mind, and spirit. We should note that except for the spirit, ātmā, all other factors themselves are constituted from the evolutes of primal materiality or prakṛti.

In an attempt to clarify the fundamental distinction between Indian and Western modes of thinking about man, Mohanty investigate the topics of 'subject' and 'person.':

> . . . [S]uch is the analysis of empirical self into puruṣa and prakṛti (which remains paradigmatic for Hindu thought). The puruṣa by itself, even if individualized as in Sāṃkhya, or universalized as in some systems of Vedānta, is still a witness self, a transendental observer, disinterested, neutral (madhyasta), the pure subject of knowledge but not an agent or enjoyer. Nor is the psycho-physical body-inner-

sense-ego-buddhi complex by itself a person, for it not self-conscious; it can, for example, act without knowing that it does so.[147]

Disease and its treatment come to play their part in such an individual or person.

[147] Mohanty, Subject and Person, p. 268.

(6)

Illness and Treatment

What we understand by an 'illness' or 'disease' is not exclusively dependent on the pathological features of a human condition. To put it another way, what is considered pathological by medical science, and labeled as a disease, is sometimes itself determined by factors outside a specifically scientific domain.[148]

For example, a clinician may come across a child with a bruise on his arm or leg. A diagnosis of 'contusion' is made. The child may have come from a playing field or may have fallen from a swing. An appropriate rest of the bruised area is advised and there the matter may conclude. But suppose there comes a time when different segments of society--including family members, teachers, social workers, nurses and pediatricians--start noticing a pattern developing in society wherein they observe that a number of children are being hurt and injured, not from playing, but by some of the parents and guardians themselves. What was a simple bruise is now diagnosed as a 'battered child syndrome.'

[148] Szasz, The Myth of Mental Illness in Beuchamp et el. (Ed.) Contemporary Issues in Bioethics pp. 76 - 79.

Without the awareness acquired from outside the narrow field of pathology, one might have mislabeled a potentially fatal condition.[149]

There is another facet to the interaction between medical science and the perception of a society at large, the former being an integral part of the latter. There has been a long history of failure to recognize and deal with harmful effects of alcohol.[150]

As the harm done to the family, to society and to the nation came to be recognized, alcoholism was finally recognized as a serious disease. The cost for health care rose because insurance companies had to start paying for damages associated with drunk drivers and other alcoholic diseases.[151] We can easily appreciate that, without raising of the consciousness of citizens at the levels of family and society, about situations such as 'family stress secondary to alcoholism' and 'spousal abuse associated with alcoholism,' our present understanding of the full impact of alcohol on the family and society would not have been possible.

With societal change in the attitude towards alcoholism, one comes to recognize it as a 'serious illness.' Once it is recognized as an

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[149] Westman, Child Advocacy pp. 15 - 46.

[150] Boulding, The Concept of Need for Health Services in MacKinlay (Ed.) Economics and Health Care pp. 42 - 43.

[151] Segal, Drugs and Behavior pp. 390 - 391.

illness, then the whole question is put in the context of treatment.

Even a desired change in the social behavior of the patient is cast in the form of treatment. Of course, once a certain human condition is termed a 'disease,' the label influences society's attitude towards it. The point is not which came first--the identification of a condition as a disease or the societal attitude toward it--but the fact that determining whether a certain condition is or is not a disease does not depend exclusively on the presence or absence of a 'pathology.'

As another example, consider the charts depicting normal weight according to height and weight which are quite common. Still, what is considered 'normal' weight is influenced at times by 'non-scientific' factors such as what is the 'normal body image' at a given time in society. The advertising and entertainment industries have influenced people's perception of what is a normal body image and consequently what is popularly accepted as a normal body weight. This would explain the emaciated look favored among certain age groups of young people and how illnesses such as bulemia and anorexia arise.[152] The importance of the communication and advertising technologies for this kind of perception cannot be

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[152] Craig, et al. The Etiology and Treatment of Bulimia Nevosa pp. 63 - 66.

overemphasized. Without a strong and sustained impact of such technologies, the prevailing norm in evaluating body weight would not have been possible. The difference between the mythical image of the 'Marlboro Man' and the cancerous lungs of a smoker is an indication of the technological power of persuasion.

But all of these interactions between science, technology and social perception take place within a certain context. Everyone taking part in discussion and debate about such topics more or less accepts the prevailing "scientific" outlook. Generally, people have faith in the process of gathering data, postulating hypotheses, quantitatively measuring and checking results obtained against the results anticipated to provide us with a firm knowledge of things as they are. It is this concept which drives the scientific community to collect information, to dissect the body--human or social or political--to the utmost degree, and to propose corrections based on such hypotheses. Such a scientific approach views the human body as only an anatomical and chemical entity. Medical science tries to recognize and analyze the structural and chemical deviations and tries to offer corresponding corrections. These interventions are recognized as medical treatment.

Moreover, the more precisely that structural and chemical corrections are offered, the more "scientific" the treatment appears to be. From hip replacement for arthritis and coronary artery bypass for coronary disease to sedation for the agitated elderly patient and lithium for the mentally disturbed, we see different degrees of accuracy in treatment. On one hand, structural and chemical changes in the body are viewed and measured. On the other, structural and chemical changes of potential modalities of the therapy are reviewed and calibrated. These two are then mated and further measurements are taken. The results are again measured in terms of structural and chemical parameters. The presence of the measurable data is the very essence of the scientific enterprise. So much so that, whether a branch of inquiry is known as 'hard' or 'soft' science depends upon its ability to provide so-called 'hard' data.

Then, to obtain the 'hard' data of the numbers in clinical science, we have to take the patient into this abstraction. Foucault presents this point as follows:

> This patient gaze [of the scientist] has even been attributed with the power of assuming--with the calculated addition of reasoning (neither too much nor too little)--the general form of all scientific observation: 'We observe him in the same

way that we observe the stars or a laboratory experiment.' . . . In order to know the truth of the pathological fact, the doctor must abstract the patient... Paradoxically, in relation to that which he is suffering from, the patient is only an external fact; the medical reading must take him into account only to place him in parenthesis. [153]

The point is that the way we understand disease and the individual who is affected by a disease goes to the very heart of what medicine is and how it is practiced. The important thing is to understand these twin entities, disease and the person suffering the disease, in a concrete unity, not in some mathematical abstraction.

According to Caraka, as we have seen, a human embryo originates from a combination of five factors: mother and father, [nourishing] juices/saps/tastes, wholesomeness of the constituents, mind, and spirit. These five factors contribute different parts/aspects of the embryo. Even a brief review of what parts are contributed by which factor may help us to understand Caraka's concept of health and disease.

From the mother (mātā), the embryo gets its skin, blood, flesh, fat, umbilicus, heart, lung, liver, spleen, kidneys,

[153] Foucalt, The Birth of the Clinic, pp. xv, 8.

bladder, and intestines. From the father (pitā), it gets hair on the face, hair on the head, teeth, bones, vessels, muscles, ligaments, and semen.

Without the spirit/self (ātmā), there would not be an embryo. The inner being of the self is the inner being or spirit of the fetus. That is indeed known as animated soul or 'jiva.' Though the spirit by itself is unborn and undying, when it becomes joined to the sperm and ovum, it helps to produce the fetus. It is only in this sense that a spirit can be said to be 'born,' i. e., in combination with the sperm and the ovum. The spirit is responsible for things such as lifespan, knowledge of one's self, breaths of life, activation and sustenance of life, specific voice, shape and complexion, desire and aversion towards happiness and misery respectively, awareness, courage, intellect, memory, ego and effort.

If a woman and a man follow a wholesome regimen (sātmya), then their cohabitation produces an offspring in a disease-free state. There will be absence of lethargy and greed in the fetus and it will have clarity of sense faculties.

In the absence of juices/saps/tastes (rasa), even the mother cannot remain alive, then what of the fetus? With the proper juices/saps/tastes, the fetus is produced and sustained, in the absence of proper juices/saps/tastes, no conception can take place. From the juices/saps/tastes, the fetus receives growth of the body, bonding with life breaths and obtains satiety and enthusiasm.

It is the mind (sattva/manas) that connects the soul with the body. The sense faculties are capable of processing sense information only in the presence of the mind. At the time of death, as the mind starts to leave the body, the sense faculties become incapable of functioning. The contribution of the mind to the fetus is to provide it with attachment, character, purity, envy, memory, confusion, detachment, possessiveness, valor, fear, anger, lethargy, enthusiasm, sharpness, softness, seriousness, instability, etc.[154]

There are several points to be noted in this description of what constitutes the self or the person. The contributions from mother and father are in the form of a variety of body tissues. Mind is a

[154] CS. 4. 3. 6 - 18.

separate entity and so also is spirit. For both of these, the new to-be-born 'self' is him/herself responsible. However, an embryo--which is made up of mind, spirit, and body--along with its health is influenced by all five factors. Life nourishing juices, the wholesome regimen followed by parents, and the appropriate wholesome combination of all the constituent provide a receptacle, as it were, for 'the self' with its spirit, mind, and subtle elements, to be a healthy newborn.

The human body so formed is, of course, ultimately made up of five fundamental elements, namely, space, fire, wind, water, and earth. When the constituent body elements (dhātu) which make up the person and which sustain him/her are in harmony and in balance, the individual is free from disease and is said to be healthy. When they are in disharmony, are not in balance, the condition is called dhātu vaiṣyama. It is the function of medical science to correct this imbalance. When this imbalance occurs, it causes an excess of one or more of the doṣas (the defective humors), such as wind (vāyu), bile (pitta), and phlegm (kapha/ ślesmaṇa).

All the five factors anteceding the formation of an embryo will influence the humors of the newborn. Some persons are born with these doṣas (humors) in balance and, in that case, they do not

become sick. Those who have an imbalance of humors from the time of conception do fall sick often.[155] All the diseases that occur innately are due to an abnormality of one or more of these humors. Disharmony of the constituent tissue elements (dhātu) is called deterioration and their harmony is called a natural state. Health is known as comfort or ease and illness as discomfort or unease.[156]

A person well versed in the science of medicine ought to be familiar with the normal and abnormal states of the humors (doṣas). The status of wind (vāta), bile (pitta), and phlegm (kapha) in the live body is innate. The scholar should be inquisitive about their [vata-pitta-kapha's] normal status and their deterioration.[157]

The contribution of the three entities--wind, bile and phlegm--to the person's health will be different depending upon whether they are in balance or not. According to Caraka, when the wind (vāyu) is in harmony and not virulent, it sustains the mechanism of the body. It is in the form of four life-breaths in a person. The wind is an

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[155] CS. 1. 7. 39 - 40.
samapittānilakaphāḥ kecidgarbhādi mānavāḥ|
dṛśyante vātalāḥ kecitpittalāḥ śleṣmalāstathā ||
teṣāmanāturāḥ pūrve vātalādyāḥ sadāturāḥ |
doṣānuśayitā hyeṣām dehaprakṛtirucyate ||

[156] CS. 1. 9. 4.
vikāro dhātuvaiṣamyam sāmyam prakṛtirucyate |
sukhasajñakamārogyam vikāro duḥkhameva ca ||

[157] CS. 1. 18. 48.
nityāḥ prāṇabhṛtām dehe vātapittakaphāstrayaḥ |
vikṛtāḥ prakṛtisthā vā tān bubhutseta paṇḍitaḥ ||

initiator of all types of actions. It is a restrainer as well as a prompter of the mind. It is the organizer of all the constituent elements of the body. It is a unifying principle of the body. It is a prompter of speech. It is the source of hearing as well as touch. It is the activator of fire in the body. It is the purifier of the bad humors. It is the remover of the excreta to the exterior. It is the opener of the gross and minute channels in the body. Its shapes the features of the fetus.

When the wind is vitiated, on the other hand, it impacts unfavorably on the strength, complexion, happiness and lifespan of the person. It disturbs the mind, it harms all the sense faculties. It may destroy the embryo or deform it or prolong its confinement. It causes fear, sadness, confusion, depression, and incoherent chattering.[158]

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[158] CS. 1. 12. 8.

vāyuh tantrayantradharah prāṇodānasamānavyānāpānātmā
pravartakah ceṣṭānāṃ uccāvacānāṃ niyantā praṇetā ca manasah
sarvendriyāṇāṃ udyojakah sarvendriyārthānāṃ abhivoḍhā
sarvaśarīradhātuvyūhakarah sandhānakarah śarīrasya pravartako
vācah prakṛtih sparśaśabdayoh śrotrasparśanayormūlaṃ
harṣotsāhayoryonih samīraṇoʃgneh doṣasaṃśoṣaṇah
kśeptā bahirmalānāṃ sthūlāṇusrotasāṃ bhettā
kartā garbhākṛtīnāṃ
āyuṣoʃnuvṛttipratyayabhūto bhavatyakupitah |
kupitastu khalu śarīre śarīraṃ nānāvidhairvikārairupatapati
balavarṇasukhāyuṣāmu-paghātāya mano vyāharṣayati
sarvendriyāṇyupahanti vinihanti garbhān vikṛtimāpādayatyatikālaṃ
vā dhārayati
bhayaśokamohadainyātipralāpāñjanayati prāṇāṃścoparuṇaddhi |

According to Caraka, it is fire in the form of bile (pitta) which, in its normal or aggravated state, causes the following good or bad effects: digestion or indigestion, vision or lack of vision, normal or abnormal body heat, normal or abnormal complexion, heroism or fear, joy or anger, serenity or delusion; and similar other pairs.

Soma (water, moon, soma plant) in the form of phlegm (kapha) also causes good or bad effects in the person. These are as follows: sturdiness or laxity, enthusiasm or laziness, virility or impotency, knowledge or ignorance, comprehension or confusion, and such other pairs.[159]

Punarvasu Ātreya, the teacher, after listening to these three presentations of good and bad effects and their causes by three discussants, states that we should consider all three doṣas

[159] CS. 1. 12. 11-13.
marīciruvāca agnireva śarīre pittāntargataḥ kupitākupitaḥ śubhāśubhāni karoti
tadyathā paktimapaktiṃ darśanamadarśanaṃ mātrāmātratvamūṣmaṇaḥ prakṛtivikṛtivarṇau śauryaṃ bhayaṃ krodhaṃ harśaṃ mohaṃ prasādamityevamādīni cāparāṇi dvandvānīti ||
tacchrutvā marīcivacaḥ kāpya uvāca soma eva śarīre ṣleṣmāntargataḥ kupitākupitaḥ śubhāśubhāni karoti tadyathā dāḍhyaṃ śaithilyamupacayaṃ kārśyamutsāhamālasyaṃ vṛṣatāṃ klibatāṃ jṅānamajṅānaṃ buddhiṃ mohavevamādīni cāparāṇi dvandvānīti ||
tacchrutvā kāpyavaco bhagavān punarvasurātreya uvāca sarva eva bhavantaḥ samyagāhuranyatraikāntikavacanāt sarva eva khalu vātapittaślesmāṇaḥ prakṛtibhūtāḥ purugsamavyāpannendriyaṃ balavarṇasukhopapannamāyuṣā mahatopapādayanti samyagevācaritā dharmārthakāmā iva niḥśreyasena mahatā puruṣamiha cāmurṣmiśca loke vikṛtāstvenaṃ mahatā viparyayeṇopapādayanti ṛtavastrayaḥ iva vikṛtimāpannā lokamuśubhenopaghātakāla iti ||

constituting the body in relation to one another and not in isolation.

It is the balance of the three which gives a person healthy, happy life full of vigor. We should note here the correspondence of the three defective humors (doṣas) to three of the five gross elements: wind (vāyu) to air, bile (pitta) to fire, and phlegm (kapha) to water. Thus, according to Caraka, a correspondence is established between the disease-causing doṣas in the body and the world-at-large which is made up of five gross elements, namely space, air, fire, water, and earth. Another noteworthy feature of the relationship between disease and defective humors (doṣas which, in turn, correspond to the gross elements) is the depiction that one and the same defective humor, in isolation or in combination with other humors, cause not only what we would call the 'mental' but also the 'bodily' changes. For example, bile/fire (pitta/agni) not only affect digestion, body heat and complexion, but is also responsible for such emotions as joy, anger, or fear. As expounded by Caraka, the intimate relationship between a person's body and the world on the one hand and between a person's body and his/her mind on the other is not something imposed upon medical science as a desirable goal but is inherent in the fundamental structure of āyurveda.

Caraka has elucidated this close connection between 'mental' and 'physical,' and between 'person' and 'world' in a variety of ways. This relationship is brought out through various classifications of diseases.

Diseases can be classified in various ways depending on different features of a disease or its etiology. Diseases come into being in four ways: those caused by accident, by wind (vāta), bile (pitta), or phlegm (śleṣmaṇa/kapha).[160]

Accidental or adventitious diseases are those that occur due to causes outside the person, in contrast to the etiology related to three doṣas which are innate in the body. But no sooner are diseases divided into two classes, than Caraka draws our attention to the underlying unity because of the presence of pain.

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[160] CS. 1. 20. 3 - 5.
catvāro rogā bhavanti āgantuvātapittaśleṣmaninimittāḥ
teṣāṃ caturṇāmapi rogāṇāṃ rogatvamekavidhaṃ bhavati ruksāmyānyāt
dvividhā punah prakṛtireṣāṃ āgantunijavibhāgāt
dvividhaṃ ca eṣāmadhiṣṭhānaṃ manahśarīraviśeṣāt vikārāh punar
aparisaṃkhyeyāh prakṛtyadhiṣṭhāna
-liṅgāyatanavikalpaviśeṣaparisaṃkhyeyatvāt ||
mukhāni tu khalu āgantoh nakha-daśana-patana-abhicāra-abhiśāpa-
abhiṣāṅga-abhighāta-vyadha-bandhana-veṣtana-pīḍana-rajju-dahana-
śastrāśanibhūtopasargādīni
nijasya tu mukhaṃ vātapittaśleṣmāṇāṃ vaiśamyaṃ ||
dvayostu khalvāgantunijayoh preraṇamasātmyendriyārthasaṃyogah
prajñāparādhah pariṇāmaśceti ||

Still, in these four illnesses there is a single ill-*ness* based on the commonality of pain. However, their nature is twofold, based on the distinction of accident and innateness. And their location is also twofold, based on the distinctiveness of mind and body.

There are some important points to be noted in Caraka's description of the diseased states. Since a disease is a disturbance or an imbalance among doṣas, we can classify diseases according to the origin of such disturbance. If the originating cause is outside of a person, then it is called 'accidental' disease. If a cause is a defective humor within a person, then it is called 'innate' disease. The latter is further divided into three types, depending on which particular doṣa is disturbed initially.

Another way to classify is to note where the imbalance occurs, in the mind or the body.[161] Thus, we have two sorts of classifications: from where the disturbance originates and what location it affects. For example, some of the causes of an accidental

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[161] CS. 1. 20. 6 - 7.
sarve'pi tu khalvete'bhipravṛddhāh catvāro rogāh parasparamanubandhanti
na ca anyonyena saha sandehamāpadyante ||
aganturhi vyathāpūrvaṃ samutpanno jaghanyaṃ vātapittaślesmaṇāṃ vaiṣamyamāpādayati
nije tu vātapittaślesmāṇah pūrvaṃ vaiśamyamāpadyante jaghanyaṃ vyathāamabhinirvartayanti ||

disease are as follows: nails, teeth, falls, spells, curses, blows, penetrating injuries, ropes, burns, weapons, fright, natural calamities, etc. However, the pain, *dis* -comfort, or *dis* -ease is common to all four kinds of disease.

This common connection among diseases classified into different groups is elaborated a little later by Caraka with the explanation that accidental diseases start with pain but do eventually affect the doṣas, whereas diseases initiated with a disturbance in doṣas do eventually cause pain. (Fig. 3)[162]

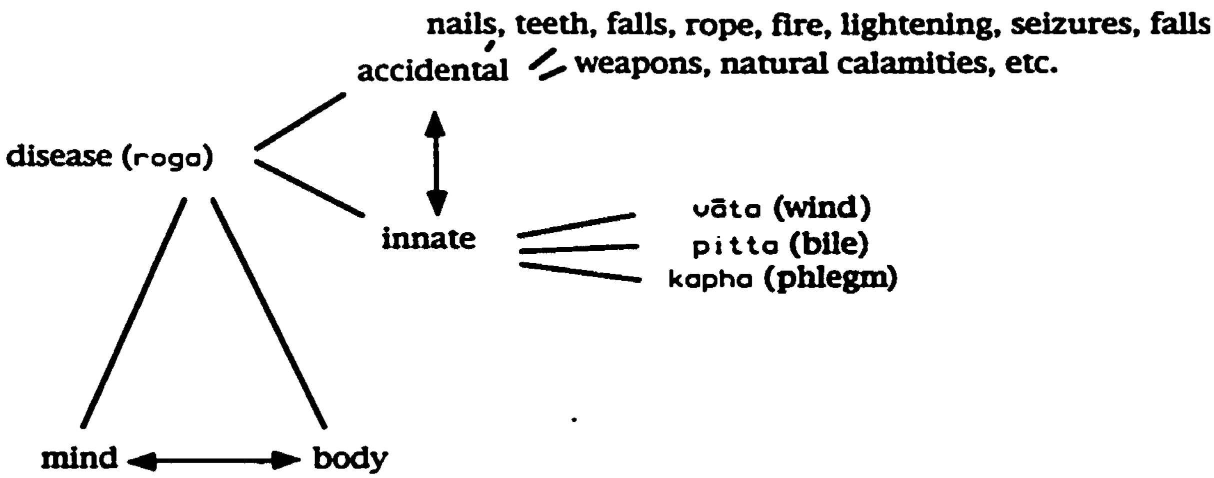
Thus, Caraka is careful to remind us repeatedly that just because we have classified diseases for our understanding, this does not mean that the diseases in different classes are inherently distinct or separable from one another.[163]

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[162] Figure 3, p. 140.

[163] CS. 1. 7. 51 - 54.

ye bhūtaviṣavāyvagnisaṃprahārādisaṃbhavāḥ |
nṛṇāmāgantavo rogāḥ prajñā teṣvaparādyati ||
īrṣyāśokabhatakrodhamānadveṣādayaśca ye |
manovikāraste'pyuktāḥ sarve prajñāparādhajāḥ ||
tyāgaḥ prajñāparādhānāmindriyopaśamaḥ smṛtiḥ |
deśakālātmavijñānaṃ sadvṛttasyānuvartanam ||
āgantūnāmanutpattāveṣa mārgo nidarśitaḥ |
prājñaḥ prāgeva tat kuryādhitaṃ vidyādyadātmanaḥ ||


nails, teeth, falls, rope, fire, lightening, seizures, falls
accidental
weapons, natural calamities, etc.
disease (roga)
innate
vāta (wind)
pitta (bile)
kapha (phlegm)
mind
body

(Fig. 3)

A person may be born with his doṣas in relative balance or imbalance. In his life's travels and travails, he encounters the world through his sense faculties and intellect. Thus besides the basic doṣa balance or imbalance that a person is born with, a person also becomes ill or not depending on his utilization of his faculties. Thus, it is a person's own action or karma which will determine the course of his or her life.

Caraka's position regarding the connection between one's disease and one's karma is illustrated in the discussion about a disease which can be easily blamed on supernatural powers. 'Insanity' (unmāda), for example, can be caused by abnormal changes in the doṣas or can be due to some accidental cause external to a person. Some people blame gods or ancestors as an exogenous cause of insanity. Caraka holds that one is responsible for one's own actions, neither gods nor demons are responsible for one's insanity. They, gods and demons, do not harm the persons who do not harm themselves by their own actions.

None of the gods (deva), celestial singers (gandharva), fiends (piśācā), demons (rākśasāḥ) or any others, torment a man who is himself untormented. They [deva, etc.] only follow the one who is tormented as a result of his own karma. It is not the disease which

causes the torment nor is the cause a *fait accompli.*[164]

The intelligent person, therefore, does not blame gods, ancestors, or demons for the diseases resulting from one's own error of cognition. One should consider oneself as agent of one's own happiness and misery. It is an error of cognition that leads one to disregard gods, ancestors, elders etc., and may invite their wrath. But ultimately one is responsible for ones actions. Therefore, one should practice what is beneficial and should avoid what is harmful.[165]

Such is the topography of disease according to Caraka. The means of knowledge (to know what is health and what is disease) does shed light on the total structure of medical science. Let us briefly review what Caraka states in this regard.

Everything is indeed twofold, either real or not-real.

Examination of anything is fourfold: instruction from an authority (āptopadeśa), observation/perception (pratyakṣa),

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[164] CS. 2. 7. 19 - 20.

naiva devā na gandharvā na piśācā na rākṣasāḥ |
na cānye svayamakliṣṭamupakliṣnanti mānavam ||
ye tvenamanuvartante kliśyamānam svakarmaṇā |
na sa taddhetukaḥ kleśo na hyasti kṛtakṛtyatā ||

[165] CS. 2. 7. 21 - 23.

prajñāparādhāt sambhūte vyādhau karmaja ātmanaḥ |
nābhiśamsedbudho devānna pitṛnnāpi rākṣasān ||
ātmanameva manyeta kartāram sukhaduḥkhayoḥ |
tasmācchreyaskaram mārgam pratipadyeta na traset ||
devādīnāmapacitirhitānām copasevanam |
te ca tebhyo virodhaśca sarvamāyattamātmani ||

inference (anumāna), and practical reasoning (yukti).[166]

Caraka here gives us specific information about how one gets valid knowledge. This is important in at least two respects. First, since the four ways are the means of any and all knowledge that we have, they include the medical knowledge given in āyurveda too. Second, the students of āyurveda also will get knowledge through these four ways.

Now, each of these means are further defined by Caraka. First, 'authority' as a valid means of knowledge does not mean any political or sectarian person *in* a position of authority.

> Those persons, who are free from constantly active/unstable attribute-strand (rajas) and inert/dark attribute-strand (tamas) by the strength of austerity (tapas) and knowledge (jñāna), whose knowledge is tri-temporal [past, present, and future times], pure, and always uninterrupted, are authorities (āptāḥ), cultured ones, enlightened ones, and their word is indubitable. They speak the truth. How can they, devoid of constantly

[166] CS. 1. 11. 17.
dvividhameva khalu sarvaṃ saccāsacca
tasya caturvidhā parīkṣā
āptopadeśaḥ pratyakṣaṃ anumānaṃ yuktiśceti ||

active/unstable attribute-strand (rajas) and inert/dark attribute-strand (tamas), speak untruth?[167]

The second source of knowledge in our list is observation/perception. It is important to note that for observation/perception to occur, we need both soul and mind in addition to senses and sense objects. As Caraka says:

> An intelligence (buddhi)--which is apprehensible--comes about when there is togetherness of soul (ātmā), senses (indriya), mind (manas), and objects (artha) and is called observation/perception (pratyakṣa).[168]

The precept that observation/perception needs to precede an inference is an evidence of the importance given to observation/perception as a premier means of knowledge. And since observation/perception is necessarily confined to the present time (with the exception of alleged yogic ability for transcendent perception), it is the inference that provides us knowledge of past,

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[167] CS. 1. 11. 18 - 19.
rajastamobhyāṃ nirmuktāstapojnānabalena ye |
yeṣāṃ trikālamamalaṃ jnanamavyātaṃ sadā ||
āptāh śiṣṭā vibuddhāste teṣāṃ vākyamasaṃśayaṃ |
satyaṃ vakśyanti te kasmādasatyaṃ nīrajastamāh ||

[168] CS. 1. 11. 20.
ātmendriyamanorthānāṃ sannikarṣāt pravartate |
vyaktā tadātve yā buddhih pratyakṣaṃ sā nirucyate ||

present, and future events.

> With observation/perception (pratyakṣa) first, inference (anumāna) is made in three ways and tritemporally (applicable to past, present, and future times). By means of smoke, a hidden fire [a current event] is inferred. From seeing a fetus, a sexual intercourse [a past event] is inferred. The wise ones seeing similarly a fruit generated from a seed just here, conclude from a seed the fruit -- the past and one not yet come [a past and a future event].[169]

But a physician's task is not a simple one of inferring a single event or forecasting a solitary outcome from making an isolated observation. Physician has to take into account a multitude of observed facts to conclude the outcome of a disease and treatment. This rational activity of putting various factors together to generate knowledge is called 'practical reasoning' (yukti).

> A plant's being is from a coming together of water, plowing, seeds, and seasons. So the practical reasoning (yukti) is, likewise, the coming into being of an embryo is

[169] CS. 1. 11. 21 - 22.
pratyakṣapūrvam trividham trikālam cānumīyate |
vahnirnigūḍho dhūmena maithunam garbhadarśanāt ||
evam vyavasyantyatītam bījāt phalamanāgatam |
dṛṣṭvā bījāt phalam jātamihaiva sadṛśam budhāḥ ||

> from the coming together of the six constituent elements (dhātus). The coming into being of fire is from the coming together of fire-churns [fire-generating pieces of wood]. Equipped with practical reasoning, the four-step method eliminates the disease.[170]

We should again emphasize here that in obtaining Caraka does not rely on either some infallible text or a divine authority. He lays down four clearly defined means of knowledge as outlined above.

Once knowledge of a disease is gained, we turn to its treatment. One way to classify the treatment is to divide it into three types: those dependent upon daiva (lit., divine intervention) which for Caraka means previous karma, those dependent upon yukti (human practical reasoning), and those which can be victorious over mind. Daiva treament includes various chants, precious stones as amulets, auspicious offerings, fire oblations, acts of atonement, religious fasting, pilgrimage, etc. Those modalities depending upon yukti or practical reasoning involve the employment of food and medicinal substances or dravyas. Those specifically affecting the mind involve

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[170] CS. 1. 11. 23 - 24.
jalakarṣaṇabījaṛtusaṃyogāt sasyasaṃbhavah |
yuktih ṣaddhātusaṃyogādgarbhāṇāṃ saṃbhavastathā ||
mathyamanthana manthānasaṃyogādagnisaṃbhavah |
yuktiyuktā catuṣpādasaṃpadvyādhinibarhaṇī ||

restraining the mind from harmful contact with the sense faculties engaged with harmful sense objects.[171] Treatment directed specifically to the mind involves cultivation of knowledge, forbearance, memory and meditation.

The mention of amulets, etc., under the heading of daiva type of treatment calls to mind the Atharaveda approach to disease.[172] However, we need not give much emphasis to this type of treatment, as Caraka has elsewhere pointed out the importance of an individual's responsibility in the matter of the origin of disease, to say nothing of treatment. Besides the amulets, charms and chants, there are two groups of substances which are used in treatment, food and medicinal substances. As a matter of fact, if we consider food as something that maintains a normal balance of humors and medicinal substances as correcting imbalances, we can see food and medicine as two arms of a single type of modality. Perhaps this gives a clue to the utmost importance given to food and food preparation in Indian culture generally, and in medical science specifically. Even a cursory

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[171] CS. 1. 11. 54.
trvidhamauṣadhamiti daivavyapāśrayaṃ yuktivyapāśrayaṃ satvāvajayaśca |
tatra daivavyapāśrayaṃ mantrauṣadhimaṇimaṅgalabalyupahārahomaniyamaprāyaścitto - pavāsasvastyayanapraṇipātagamanādi
yuktivyapāśrayaṃ punarāhārauṣadhadravyāṇāṃ yojanā
satvāvajaya punarahitebhyo'rthebhyo manonigrahaḥ ||

[172] Zysk, Fever in Vedic India in J Am. Oriental Soc. 1983..

glance at the therapeutics in Caraka discloses the overlap between food and medicinal substances, with several substances occurring in both columns.

Substances, dravyas, can be said to be of three kinds: some alleviate the bad humors, some vitiate the constituent elements, and some maintain their normal state.[173] Again, the substances can be divided into three types according to their origin: animal, plant, and earthen.[174] To be effective they should be abundant, appropriate, multiple, and potent.[175] For the physician, it is important to know the quality as well as the appropriate use of these substances. Even the goatherd, shepherds, cowherds and forest dwellers may know the names and shapes of medicinal herbs. Just knowing the name or form of the substances does not qualify one as being knowledgeable about medicine. Of course, anyone who knows the name and form as well as the appropriate use of substances in their entirety can

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[173] CS. 1. 1. 67.
kiṃciddoṣapraśamanaṃ kiṃciddhātupradūṣaṇam |
svasthavṛttau mataṃ kiṃcittrividhaṃ dravyamucyate ||

[174] CS. 1. 1. 68.
tat punastrividhaṃ proktaṃ jaṅgamaudbhidapārthivam |

[175] CS. 1. 9. 7.
bahutā tatrayogyatvamanekavidhakalpanā |
saṃpaśceti catuṣko'yaṃ dravyāṇāṃ guṇa ucyate ||

definitely be called knowledgeable.[176]

All substances are made up of five principal elements or paṃca mahābhūtas.[177] At the point of intake and of being incorporated, substances are liquid and give rise to some taste. Thus, substances are said to be endowed with a juice/sap/taste or rasa. During one of the debates in Caraka-Saṃhitā, the scholars discuss the number and types of different juices/saps/tastes in the world.

After listening to various participants arguing about whether there is only one single juice/sap/taste in the world or there are innumerable juices/saps/tastes, Ātreya, the teacher, states that there are only six primary juices/saps/tastes or rasas: sweet, sour, saline, pungent, bitter, and astringent.[178]

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[176] CS. 1. 1. 120 - 123.
oṣhadhīrnāmarupānбhāṃ jānate hyajapā vane |
avipāścaiva gopāśca ye cānye vanavāsinaḥ ||
na nāmajñānamātreṇa rupajñānana vā punaḥ |
oṣadhīnāṃ parāṃ prāptiṃ kaścidveditumarhati ||
yogavittvapyarupajñastāsāṃ tatvaviducyate |
kiṃ punaryo vijānīyādoṣadhiḥ sarvathā bhiṣak ||
yogamāsāṃ tu yo vidyāddeśakālopapāditam |
puruṣaṃ puruṣaṃ vīkṣya sa jñeyo bhiṣaguttamaḥ ||

[177] CS. 1. 26. 10.
agre tu tāvadravyabhedamabhipretya kiṃcidabhidhāsyāmaḥ |
sarvaṃ dravyaṃ pāñcabhautikamasminnarthe taccetanāvadacenaṃ ca
tasya guṇāḥ śabdādayoḥ gurvādayaśca dravāntāḥ karma
pañcavidhamuktaṃ vamanādi ||

[178] CS. 1. 26. 9.
ṣaḍeva rasā ityuvāca bhagavānātreyaḥ punarvasuḥ
madhurāmlalavaṇakatutiktakaṣāyāḥ |

Initially, water in the atmosphere is gentle (saumya, related to soma, to moon-water deity, to soma plant) and is by nature cold, light, and as yet unmanifested. During and after its fall from the atmosphere, it acquires the attributes of the five principal elements. It nourishes all the forms of mobile and immobile things in the world. Thus six juices/saps/tastes pervade all forms of things, though one or the other of the elements may predominate in a juice/sap/taste.[179]

An abundance of water results in a sweet juice/sap/taste, predominance of earth and fire results in the sour, predominance of water and fire results in the saline, predominance of wind and fire results the pungent, predominance of wind and space results in the bitter, and predominance of wind and earth results the astringent. Thus, from the amount of specific principal elements present, six kinds of juices/saps/tastes are obtained. Similarly, due to the influence of the six varieties of time/seasons, all the things, mobile and immobile, e.g., plants, animals, etc., are divided into six types

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[179] CS. 1. 26. 39.
saumyāḥ khalvāpo'ntarikṣaprabhavāḥ prakṛtiśītā
laghvyaścāvyaktarasāśca
tāstvantarikṣādbhrāśyamānā bhraṣṭāśca pañcamahābhūtaguṇasamavintā
jaṅgamasthāvarāṇām bhūtānām mūrtirabhiprīṇayanti tāsu mūrtiṣu
ṣaḍabhimūrcchanti rasāḥ ||

according to different shapes and colors.[180] Of course, depending upon the influence of the substances, place, time, and strength, juices/saps/tastes or rasas, can be further subdivided into as many as sixty-three varieties.[181]

As we have seen earlier, a person is sick when the humors are in imbalance. The six juices/saps/tastes, when used properly, maintain the body and help to correct the imbalance of the bad humors.[182] For example, pungent, bitter, and astringent juices/saps/tastes aggravate the wind; and sweet, sour and saline calm it down. Pungent, sour, and saline aggravate bile; and sweet, bitter and astringent calm it down. Sweet, sour, and saline aggravate

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[180] CS. 1. 26. 40.
teṣām ṣaṇṇām rasānāṃ somaguṇātirekānmadhuro rasaḥ
pṛthivyagnibhūyiṣṭatvādamlaḥ
salilāgnibhūyiṣṭhatvāllavaṇaḥ vāyvagnibhūyiṣṭatvāt kaṭukaḥ
vāyvākāśātiriktatvāttiktaḥ pavanapṛthivyatirekāt kaṣāya iti |
evameṣāṃ rasānāṃ ṣaṭtvamupapannaṃ nyunātirekaviśeṣānmahābhūtānāṃ
bhūtānāmiva sthāvarajaṅgamānāṃ nānāvarṇākṛtiviśeṣāḥ ṣaḍṛtu
katvācca kālasyopapanno mahābhūtānāṃ nyūnātirekaviśeṣaḥ ||

[181] CS. 1. 26. 14.
bhedaścaiṣāṃ triṣaṣṭividhavikalpo dravyadeśakālaprabhāvādbhavati
tamupadekṣyāmaḥ ||

[182] CS. 3. 1. 4 - 5.
tatrādau rasadravyadoṣavikāraprabhāvān vakṣyāmaḥ |
rasāstāvat ṣaṭ madhurāmlalavaṇakaṭutiktakaṣāyāḥ |
te samyagupayujyamānāḥ śarīraṃ yāpatanti mithyopayujyamānāstu
khalu doṣaprakopāyopakalpante ||
doṣāḥ punastrayoḥ vātapittaslesmāṇaḥ |
te prakṛtibhūtāḥ śarīropakārakā bhavanti
vikṛtimāpannāstu khalu nānāvidhairvikāraiḥ śarīramupatāpayanti ||

phlegm; and pungent, bitter, and astringent calm it down.[183] With the magnitude of their combinations and permutations--of juices/saps/tastes and humors--as six primary *rasa's* subdivisions become innumerable, they prove to be useful in treating innumerable types of illnesses.[184] (Fig. 4)[185]

Let us say that a conception takes place and an individual of a given type is born. Even with the knowledge of the manner of conception, and subsequent development of a disease and its treatment (obtained through valid means as outlined above), the practice of medicine could still be a futile exercise if the lifespan for an individual is more or less considered to be predetermined. Under the circumstances the very utility of *āyurveda* itself would become questionable. Every individual in that particular type would then die after a uniform lifespan, irrespective of the presence of any illness or

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[183] CS. 3. 1. 6.
tatra doṣamekaikaṃ trayastrayo rasā janayanti
trayastrayaścopaśamayanti |
tadyathā kaṭutiktakaṣāyā vātaṃ janayanti madhurāmlalavaṇāstvenaṃ
śamayanti
kaṭvamlalavaṇāḥ pittaṃ janayanti
madhuratiktakaṣāyastvenacchamayanti
madhurāmlalavaṇāḥ śleṣmāṇaṃ janayanti kaṭutiktakaṣāyastvenaṃ
śamayanti ||

[184] CS. 3. 1. 8.
samsargavikalpavistaro hyeṣāmaparisaṃkhyeyo bhavati
vikalpabhedāparisaṃkhyetvāt||

[185] Figure 4, p. 154..

treatment. This would make any therapeutic intervention superfluous. But Ātreya says that this is *not* the way it is. He compares life and health with a chariot.

A certain type of chariot has a given durability. The lifespan of that chariot will then depend upon its built-in strength as well as the roughness or smoothness of the road and the care the driver gives to the chariot. Eventually, even the best of the chariots in the hands of the most careful charioteer will get worn out and crumble. So, it is also, with life itself.

A normal person is expected to take care of his health. Contrary to the popular perception of Indian philosophy's preoccupation with the 'other world,' Caraka assigns different priorities to human desires in life. According to Caraka, a person with unimpaired mind and intellect and with a normal personal effort regarding affairs of this and the other world would have three desires: desire for life, desire for wealth, and desire for happiness in the other world.

predominance of water (soma)	sweet
predominance of earth, fire	sour
predominance of water, fire	saline
predominance of wind, fire	pungent
predominance of wind, space	bitter
predominance of wind, earth	astringent

(Fig. 4)

Out of these desires, one should give priority first to the desire for life, because with the loss of life everything else is lost. Second is the desire for wealth. Third is the desire related to the other world.[186]

With 'life' given the premier position in the hierarchy among human pursuits, we now briefly examine what is the structure of a therapeutic regimen according to Caraka.

There are four entities which make a therapeutic regimen complete: physician (bhiṣag), attendant(upasthātā/paricāraka), substances (dravyas), patient (rogi). The desirable characteristics of each of them are as follows:[187]

The physician (bhiṣag) should be well conversant with treatises, should have seen (therapeutic) action performed many times, should be dexterous and clean.

The substances (dravyas) used in therapy should be many, appropriate to the purpose, should be prepared in so many ways as necessary, and should be effective.

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[186] CS. 1. 11. 3 - 4.

iha khalu puruṣeṇānupahatasatvabuddhipauruṣaparākrameṇa hitamiha cāmurṣmiśca loke samanupaśyatā tisra eṣaṇā paryeṣṭavyā bhavanti |
tadyathā prāṇaiṣaṇā dhanaiṣaṇā paralokaiṣaṇeti ||
āsām tu khalveṣaṇānāṃ prāṇaiṣaṇāṃ tāvat pūrvataramāpadyeta |
kasmāt
prāṇaparityāge hi sarvatyāgaḥ |

[187] CS. 1.9.3-9.

The attendant (upasthātā/paricāraka) should have knowledge of attendance, should have dexterity, empathy, and cleanliness.

The patient (rogi) should possess memory, should be able to follow instructions, should not be unduly afraid, and should be able to communicate.

Among the different parts of the therapeutic regimen, a physician's knowledge and qualities is considered to have a profound impact on the therapeutic outcome. Therefore, the physician is judged to be the most crucial part of therapy.

With the knowledge of what a 'person' is, recognizing importance of personal karma as it affects one's life, obtaining knowledge of disease and illness through valid means, and utilizing four-fold therapeutic structure, one practices āyurveda. Thus, āyurveda aims to correct the imbalances occurring in the mind (the attributes-strands rajas and tamas) and in the body (three doṣas, vāta-pitta-kapha). Ultimately, the goal of āyurveda treatise is deceptively simple: to prescribe actions which will correct an imbalance among the constituent elements.[188]

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[188] CS. 1. 1. 53.
ityuktam kāraṇam kāryam dhātusāmyamihocyate |
dhātusāmyakriyācoktā tantrasyāsya prayojanam ||

(7)

Medicine, Philosophy, and Ethics

Thus far, we have reviewed āyurveda (with its understanding of illness and treatment) and Indian philosophy (with its six schools and such key concepts as 'karma' and 'puruṣa'). Throughout our discussion, there has been present an interconnection-- albeit, at times, subtextual--between medical and philosophical concepts on one hand and between both of these to human praxis on the other. Now, here we will attempt to explicate such relationships among medicine, philosophy, and ethics.

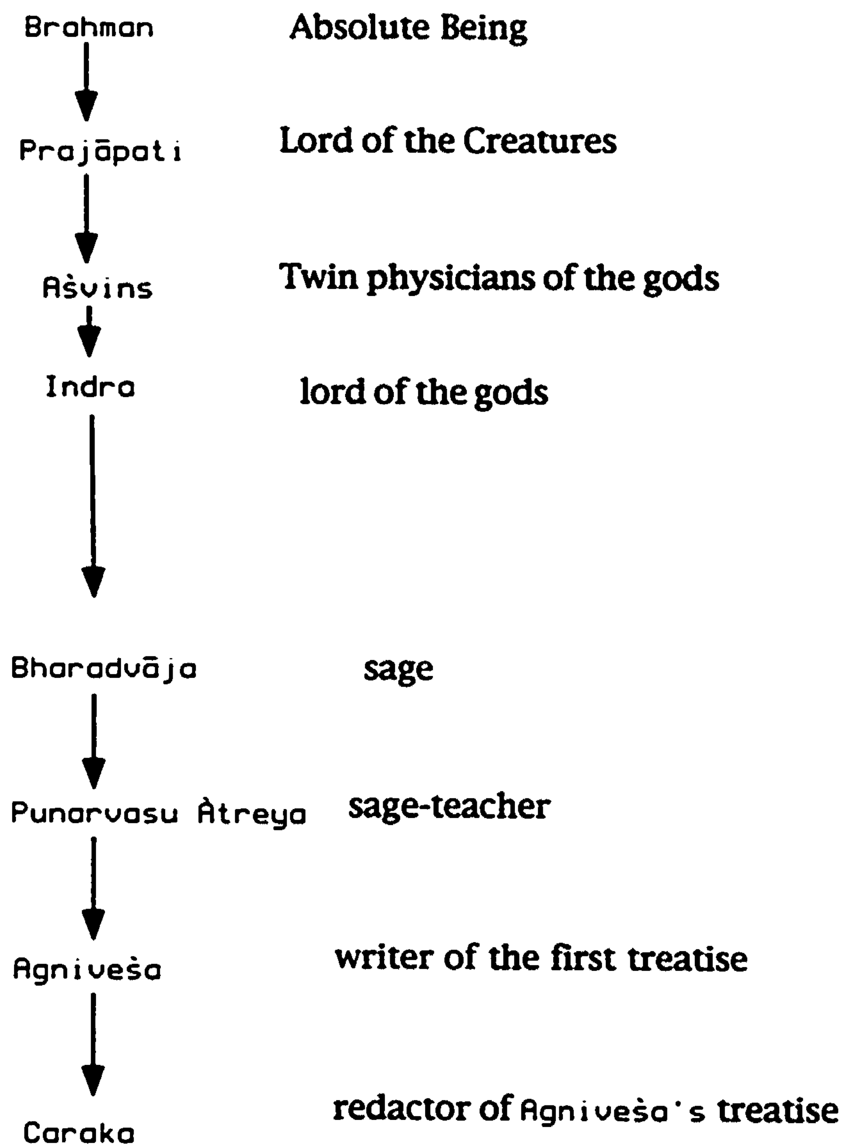
To start at the beginning, we may recall Caraka's description regarding the transmission of the Caraka-Saṃhitā tradition. Briefly, it was said that in ancient times many sages gathered and requested one of them, Bharadvāja, to approach the lord of the gods, Indra, to obtain knowledge of life science. A sage who was mortal approached Indra, who had medical knowledge and was immortal because the gods had partaken of ambrosia. The aim of life science is a long life, as is very clear from the first words in Caraka-Saṃhitā.[189] This god received his knowledge from Aśvins, the twin physicians of the gods.

[189] CS. 1. 1. 1.
athāto dīrghañjīvitīyamadhyāyagm ||

In this way the sage who received knowledge from the lord of the gods acquired knowledge which was obtained from the divine physicians. A loop of transmission from one physician to another via Indra was thus completed which can be represented as follows. (Fig. 5)[190]

The gods' twin physicians got their knowledge from Prajāpati, Lord of the Creatures, suggesting that medical science was available to the Lord of creatures when the creatures were created. Even among the gods, as the presence of the twin divine physicians suggests, there was a need for physicians. The sage's easy access to the Lord of gods for dialogue indicates that Caraka does not assign unbridgeable distances in levels of reality between gods and to men. The important point is that a knowledge of life science is found to be useful in both the divine and the human realm.

[190] Figure 5, p. 159.


Brahman
Absolute Being
Prajāpati
Lord of the Creatures
Aśvins
Twin physicians of the gods
Indra
lord of the gods
Bharadvāja
sage
Punarvasu Ātreya
sage-teacher
Agniveśa
writer of the first treatise
Caraka
redactor of Agniveśa's treatise

(Fig. 5)

Another point is clear - that knowledge is transmitted and, thus, is transmittable. After Bharadvāja received the knowledge of life science, he transmitted it to other sages.[191] Among them was Punarvasu Ātreya, who taught this science to eight pupils. Of these, Agniveśa was the one who wrote the treatise which was later redacted by Caraka.[192]

We can thus discern some lines of alliance between philosophical doctrines and life science as depicted by Caraka. First and foremost is a depiction of life science (medical science) as Veda. This overt allegiance to the Veda is significant as it helps us to locate the place of Caraka in the philosophical universe of ancient India. This is even more remarkable when we find in some sections of the Vedas a sense of adverse criticism, if not an outright hostility, towards physicians and medical science.[193]

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[191] CS.1.1.3 - 5.
dīrghajīvitamanvicchanbharadvāja upāgamat |
indramugratapā buddhvā śaraṇyamamareśvaram ||
brahmaṇā hi yathāproktamāyurvedaṃ prajāpatiḥ |
jagrāha nikhilenādāvaśvinau tu punastataḥ ||
aśvibhāṃ bhagavāñchakraḥ pratipede ha kevalam |
ṛṣiprokto bharadvājastasmācchakramupāgamat ||

[192] CS.1.1. 27.
ṛṣayaśca bharadvājājjagṛhustaṃ prajāhitam |
dīrghamāyuścikīrṣanto vedaṃ vardhanamāyuṣaḥ ||

[193] Buhler, op. cit.

Caraka-Saṃhitā, being āyur-veda, proclaims its dissociation from non-vedic doctrines such as Buddhist, Jaina, and Cārvāka. Of course, this does not mean that there wasn't any influence whatsoever from these doctrines on Caraka, or *vice versa* . For example, we do find almost 'clinical' language in the Buddhist approach in dealing with miseries of the human condition.

The Buddha's diagnostic and therapeutic insights are discernible in the Four Noble Truths:
The Noble Truth of Suffering;
The Noble Truth of the Origin of Suffering;
The Noble Truth of the Cessation of Suffering; and
The Noble Truth of the Path Leading to the Cessation of Suffering.[194]

Caraka similarly equates disease with suffering. Notwithstanding the obvious similarity of metaphors occurring between ancient Indian medicine and the Buddhists, however, Caraka clearly distinguishes his system from that of those who do not believe in the self, soul,or ātmā. And so, though the question of some mutual influence between the Buddhist doctrine--and also Jaina and Cārvāka-- and ancient Indian medical science is intriguing

[194] Tayal, The Buddha's Middle Way and Western Psychotherapy in Buddhism and Science (Ed. Kirthisinghe) p. 42.

and important, it will take us farther afield than the scope of our investigation permits here if we were to explore this line of inquiry.

Prajāpati obtained his knowledge from Brahmān, which is the 'Absolute Being,' the 'All Encompassing Existent Entity.' It is easier for us to accept this as an allegorical, and not a 'historical,' account. However, there are some implications that can be drawn from this narration. Mention of Brahman as the ultimate source of this knowledge does remind us of Vedānta, wherein every knowledge and the reality of everything is traced back to Brahman. But what appears here to be a hint of Vedāntic influence is perhaps misleading.

In Vedānta, at least in its advaita variety, Brahman is not only the Ultimate Being, but also the only Being. All modifications and varieties which we see are considered to be the result of our ignorance. Moreover, Brahman is not involved in world affairs in a way that is comprehensible to human reason. Even a description of Brahman is beyond human language and so, Brahman is described as 'not this, not this' or 'neti neti.' By assigning Brahman the status of the original teacher of medical science, Caraka involves 'the Absolute Being' in human affairs. With Brahman at the helm, Caraka at once authenticates his own presentation while distancing himself from

any doctrine which considers Brahman as an 'uninvolved' entity (or, even if involved, as an entity beyond a human capacity of assignation). Thus, Caraka appears to be somewhat at a distance from Vedānta.

We have noted that after the sage, Bharadvāja, received the knowledge, its further transmission was executed within the framework of a human discourse. Even the reason that the treatise was written by Agniveśa among the eight pupils was nothing 'supernatural' or 'inexplicable,' but the simple fact that Agniveśa was endowed with the best memory and understanding. Caraka does not use the argument that āyurveda is a 'trans-human' (apauruṣeya) science to justify its validity. This fact distinguishes āyurveda from the Mīmāṃsā approach which does consider the Vedas as eternal and 'trans-human.' Though the origin of this science is traced to hallowed antiquity, the continually available text owes its content and quality to human discourse. Thus, the treatise is brought within the human dimension. Further, in Caraka-Saṃhitā, there is a recurrent structure of debate and discourse which puts it in close proximity to the Nyāya school. As Matilal explains:

> Caraka broadly divides debates into two types. The first is held with a fellow-scholar and in a spirit of co-operation

(sandhāya sambhāṣā), but the second in a spirit of opposition and hostility (vigṛhya). Caraka gives an elaborate description about what must be done by a debater before agreeing to enter into a debate, viz. examination of the strength of the opponent, assessment of the level of knowledge of the jury and the audience, etc. . . Nyāyasūtra uses the same terms in slightly different senses. . . The Nyāyasūtra classification of debate was more systematic and hence carried more authority in philosophical circles.[195]

Dasgupta even speculates whether āyurveda was a precursor of development of 'Logic' in Indian philosophy.

Logic was of use with Indian medical men not only in diagnosing a disease, but also in the debates which they had with one another. The rival practitioners often had to show their skill and learning and debates on occasions of the treatment of illness of rich patients. The art of carrying on a dispute successfully was considered an important acquisition among medical practitioners. Thus we have a whole set of technical terms relating to disputes, such as are never found in any other literature, excepting the Nyāya-

[195] Matilal, Perception, p. 83.

sūtra. In the Caraka-saṃhitā almost the whole of the chapter called the 'Roga-bhiṣag-jitīya-vimāna' (III.8) is devoted to this purpose.[196]

It is this school of philosophy which subscribed to a proposition that, through reasoned understanding of the world, we gain knowledge and such knowledge leads us to liberation, mokṣa. In the Indian philosophical and soteriological traditions, there are four principal aims of human endeavor: dharma, Law/Ritual; artha, wealth; kāma, sensuous desires; mokṣa, liberation. In different schools one or more of the aims is emphasized. For example, as we have noted earlier, in the Cārvāka tradition satisfaction of artha, material wealth, and kāma, sensuous desires, were emphasized to the exclusion of almost everything else. For them dharma, scripturally dictated and sanctioned ritual performance, and mokṣa, liberation, were meaningless. For Mīmāṃsā, it was the performance of rituals prescribed by the Vedas that mattered most. For others, Nyāya,Vaiśeṣika and Vedānta, it was perhaps mokṣa, liberation, which was of ultimate importance, though there is some debate about the degree of commitment of various schools to the goal of liberation.[197]

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[196] Dasgupta, A History of Indian Philsophy, v.2. p. 377.

[197] Potter, Encyclopedia of Indian Philosophies: Nyāya-Vaiśeṣika pp. 23 - 24.

Āyurveda, as a life science, subscribes to the four aims of life but with a caveat. It says that life science is the highest source of all human endeavors.[198] Without life one cannot achieve any of the other human purposes. If life is not there, one can neither perform vedic rituals as interpreted by Mīmāṃsā nor can one understand the world, with such understanding leading to liberation, as explained by the Nyāya, Vaiśeṣika, Sāṃkhya, Yoga and Vedānta schools. We can see that Āyurveda is claiming its fundamental importance as a human endeavor above all other darsanas, as life is a prerequisite to any action and the aim of āyurveda is to prolong life. This is evident from the first verse of the treatise and it is reiterated as the sage, Bharadvāja, approaches the lord of gods, Indra.[199]

As previously indicated, medical science in Caraka-Saṃhitā is called āyurveda, made up of two terms, āyu and veda, which mean 'iife' and 'knowledge,' respectively. Thus, ancient Indian medical science is called a life science. Usually, when we think of life, we take it as the presence of whatever is currently living. According to Caraka, the entity which results from conjunction of body, senses,

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[198] CS. 1. 1. 15.
sukhopaviṣṭāste tatra puṇyām cakruḥ kathāmimām |
dharmārthakāmamokṣānāmārogyam mūlamuttamam ||

[199] CS. 1.1.1.
athāto dīrghañjīvitīyamadhyāyam vyākhyāsyāmaḥ ||

mind and soul, the upholder entity, the living entity, the constantly ongoing entity, and the sequentially connecting entity are each, in turn, called āyu.[200] Thus, life (āyu) is the coming together of body, sense, mind and spirit (self, ātmā). Note that there is mention of senses in addition to, and immediately following, mention of the body. As Caraka maintains, the senses are not the physical sense organs which are part of the body. In other words, the sense of hearing is not 'ear,' the sense of vision is not 'eyes,' the sense of smell is not 'nose,' the sense of touch is not 'skin,' the sense of taste is not 'tongue.' Sense (indriya) is not a corporeal organ but a 'mode' or a 'faculty' which connects mind and sense objects for knowledge to occur. Knowing itself is the function of buddhi, intellect, reason. Sense is only a channel, a medium, a faculty with which we apprehend one or another kind of sense information. So, besides the physical body, life is concerned with the instruments, the senses, which are our media of communication with everything around us.

But the mere presence of body and senses does not assure us of receiving any information, visual, auditory, olfactory, etc. For example, when we are not paying attention we do not notice

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[200] CS. 1. 1. 42.
śarīrendriyasattvātmasaṃyogo dhāri jīvitam |
nityagaścānubandhaśca paryāyairāyurucyate ||

something even if it is right in front of us. We say, "Sorry, I did not see you. I was absent-minded." As Meister Eckhart has observed, "Subtract the mind, and the eye is open to no purpose."[201] So next on the list of what 'life' encompasses is mind, manas. Following manas on the list is spirit, self, ātmā.

'Self' or 'spirit' is described as 'pure consciousness.' Without it, the structure of life is incomplete. The combination--well organized, well joined, properly yoked--of body, senses, mind, and spirit is called 'life,' āyu. Dhāri is the upholder or sustainer entity. Once life has come into being, it is sustained. The process, the power, the entity of this continuance is also called 'life.' Jīvita is an animated entity which we would normally understand as a thing 'alive.' The life which originates with the coming together of body, senses, mind, and soul is also constantly ongoing, nityaga. It is not momentary. It travels in time. And this also is life. Finally, it is an uninterrupted sequential entity, anubandha. It is 'life' in all these senses that is considered by Caraka.

Life, then, is not something identified only with an individual, temporally confined entity. It is a thread which runs from inception, or the coming together of body, sense organs, mind and spirit, and

[201] Eckhart, Meister Eckhart in Lipsey, Coomaraswamy: Selected Papers, v. 1.p.43.

continues with 'life' crossing the boundary from one birth to the next. Construed in such terms, the science of life concerns itself with a much broader role than one might anticipate if it is understood as related to the health and disease only of an individual, limited to one's present lifespan.

Caraka definitely subscribes to the doctrine of rebirth of ātmā, 'self' or 'spirit.' If the mother and father were the sole cause of birth--and ātmā, soul, did not enter an embryo independent of parents--then one of the following two situations would have to occur: the spirit would be transferred from the parents either in a single unit or in parts. If a whole of spirit were to transfer from the parents to an embryo, the parents would be left without a spirit and would perish. The subtle spirit is not divisible. Therefore, it comes into the embryo as a sixth element along with other five. The ātmā element is without beginning and is not constructed from other elements. However, the combination and separation of these elements are caused by karma of ātmā.[202]

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[202] CS. 1.11.9-10, 12-13.

ātmā mātuḥ puturyā yaḥ so'patyaṃ yadi saṃcaret|
dvividhaṃ saṃcaredātmā sarvo vā'vayavena vā ||
sarvaścet saṃcarenmātuḥ piturvā maraṇaṃ bhavet |
nirantaraṃ nāvayavaḥ kaścitsūkṣmasya cātmanaḥ ||
vidyāt svābhāvikaṃ ṣaṇṇāṃ dhātunāṃ yat svalakṣaṇaṃ |
saṃyoge ca viyoge ca teṣaāṃ karmaiva kāraṇam ||
anādeścetanādhātornesyate paranirmitiḥ |
para ātmā sa cedheturiso'stu paranirmitiḥ ||

Of course, there are those who do not believe in ātmā and karma. Caraka is severe in his criticism of them. Of the fallen, the 'non-believers' (nāstika, lit., the 'it [ātmā]-is-not believers') have fallen to the greatest extent. For the 'non-believers' there is no method of ascertainment, nothing to be ascertained, no agent, no cause, no gods, no sages, no adepts, no karma, no fruits of karma and no ātmā.[203]

Caraka indicates his belief in spirit (ātmā) and its rebirth, not only in defining life (āyu) as a continuing and ongoing entity, but additionally--and quite explicitly--he castigates in very strong terms those who do not believe in an ongoing entity like ātmā. For him, the doctrine of karma and the fruits of karma are inextricably linked to the notions of rebirth and ātmā. None of the three beliefs--karma, rebirth, and ātmā--is expendable. Thus, Caraka clearly distinguishes himself from the Buddhists who believe in karma but not in the existence of a permanent entity like ātmā.

We have noted that the reason why Agniveśa was able to write his treatise was not because of any boon or favor granted to him by

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[203] CS. 1.11.14-15.

na parīkṣā na parīkṣyam na kartā kāraṇam na ca |
na devā narṣayaḥ siddhāḥ karma karmaphalam na ca ||
nāstikasyāsti naivātmā yadcchopahantātmanaḥ |
pātakebhyaḥ param caitat pātakam nāstikagrahaḥ ||

the gods, but as a result of his own memory and capacity to understand the instructions he had received from his teacher. It was Agniveśa's own karma--a human act--which brought this science to us. This refrain of the importance of karma continues throughout Caraka-Saṃhitā. The life science which is concerned with a long and healthy life is dependent upon one's actions.

Caraka's allegiance to life--as an entity not confined to a single birth--and to karma is reinforced in a reply by Ātreya to a question from Agniveśa. Ātreya says that the lifespan of beings requires practical reasoning. Life's strength and weakness are located in daiva (a divine entity, fate) and in puruṣakāra (personal action). According to Caraka, daiva should be understood as karma done by ātmā in a previous embodied life, whereas puruṣakāra is an action done in this life.[204] Thus, whatever happens to an individual is traced back to his/her own action performed either in this or in a prior life. The strength of both kinds of karma could be high, medium, or low. If daiva (karma of a previous life) is of low strength, then it can be overcome by puruṣakāra (karma of this

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[204] CS. 3.3.29--30.
ihāgniveśa bhūtānāmāyuryuktimapeksate |
daive purusakāre ca sthitam hyasya balābalam ||
daivamātmakṛtam vidyāt karma yat paurvadaihikam |
smṛtah purusakārastu kriyate yadihāparam ||

life.)[205] It is one's own karma that causes suffering and not any gods or some celestial beings.[206]

In another chapter Caraka indicates that the term daiva means karma done in a previous life. Because of that, in time, we acquire disease. There is not any strong karma whose fruits are not experienced. Intractable diseases, born of karma, subside when their fruits are finished.[207] Caraka reitererates the same principle that an action done previously (in a previous life) is called daiva, and karma done in this life is called pauruṣakāra (personal acts). [208]

Moreover, the effect of karma is not limited to an individual; it can have societal effects too. This is made clear when Agniveśa asks his teacher about the causes of destruction of populations. Ātreya replies that at the root of deterioration of wind, etc., are adharma (unrighteous action) and previous bad karma. When people have acted unrighteously and perform bad karma, the winds change for

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205 CS. 3.3.33.
...
daivaṃ purusakāreṇa durbalaṃ hyupahanyate ||

206 CS. 2.7.19-20. op. cit.

207 CS. 4.1.116-117.
nirdiṣṭaṃ daivaśabdena karma yat paurvadehikam |
hetustadapi kālena rogāṇāmupalabhyate ||
na hi karma mahat kiṅcit phalaṃ yasya na bhujyate |
kriyāghnāḥ karmajā rogāḥ praśamaṃ yānti tatkṣayāt ||

208 CS. 4.2.44.
daivaṃ purā yat kṛtamucyate tat tat pauruṣaṃ yattviha karma dṛṣṭaṃ
|

the worse, water dries up, and medicinal herbs deteriorate and lose their potency.[209] Even destruction of people by weapons is traced back to people's bad karmas, unrighteous acts, such as attacking each other within their group or attacking outsiders or being attacked by outsiders. Such harm occurs when there is an excess of greed, anger, confusion, and conceit and when people resort to aggression. [210]

Further, Karma is an engagement, an activity of speech, mind and body. These are actions that can lead to disease or maintain health, depending upon whether they are appropriate or not.[211] Three sorts of karma can occur through speech, mind and body:

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[209] CS. 3.3.19-20.
iti śrutvā janapadoddhvaṃsane kāraṇāni punarapi
bhagavantamātreyamagniveśa uvāca atha khalu bhagavan
kuto mūlameṣām vāyvādīnāṃ vaiguṇyamutpadyate yenopapannā
janapadamud dvaṃsantīti||
tamuvāca bhagavānātreya sarveṣāmapyagniveśa
vāyvādīnāṃ yadvaiguṇyamutpadyate tasya mūlamadharmaḥ tanmūlam
vā'satkarma pūrvakṛtaṃ tayoryoniḥ prajñāparādha eva |...

[210] CS. 3.3.21.
tathā śastramabhavasyāpi janapadoddhvaṃsasyādharma eva
heturbhavati |
ye'tipravṛddhalobhakrodhamohamānāste
durbalānavamatyātmasvajanaparopaghātāya
śastreṇa parasparamabhikrāmanti parān vā'bhikrāmanti
paraivā'bhikrāmyante ||

[211] CS. 1.11.39- 41.
karma vāṅgmanaḥśarīrapravṛttiḥ |tatra
vāṅgmanaḥśarīrātipravṛttiratiyogaḥ
sarvaśo'pravṛttirayogaḥ...||
saṃgraheṇa cātiyogāyogavarjaṃ karma
vāṅgmanaḥśarīrajamahitamanupadiṣṭam
yattaccamithyāyogaṃ vidyāt ||
iti trividhavikalpaṃ trividhameva karma prajñāparādha iti
vyavasyet ||

excessive engagement, complete absence of engagement, and wrong (harmful) engagement. This is known as prajñāparādha, error of cognition, a malfunctioning of intelligence.

It is true that almost all the schools of Indian philosophy subscribe to the karma doctrine. But the constant refrain of karma as a causative factor in disease and health posits karma as one of the central features of ancient Indian medicine. Mīmāṃsā was perhaps the only ancient system other than āyurveda which had accorded karma a centrality of such high degree. However, Mīmāṃsā was concerned with dharma, which meant performing all the ritual karmas (acts) prescribed by Vedas. In the Upaniṣadic period, the meaning of karma was extended beyond the boundary of a vedic ritual into the realm of all human activities.[212] It seems that āyurveda has made full use of this extended meaning of the karma by considering karma of an individual-- all the acts of speech, mind, and body--as underlying the etiology of all diseases. The possibility of āyurveda itself influencing other schools in their extension of the meaning of karma cannot be ruled out.

Thus far we have seen that Caraka considers āyu (life) as an existing and ongoing principle, with ātmā (spirit) continuing from one

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[212] Tull, The Vedic Origin of Karma pp. 28 - 43.

birth to another, and karma (of a past and a present life) affecting health and disease. Let us briefly review Caraka's presentation of the means (pramāṇa) for ascertaining knowledge. There are four such ways: 1. words of authorities (āptavacana), 2. observation/perception (pratyakṣa), 3. inference (anumāna), 4. practical reasoning (yukti).

Recalling the pramāṇas (means of knowledge) as accepted by various schools we have seen, following is a table which we can use to compare āyurveda's ways of ascertaining knowledge with those of the other schools of philosophy. (Fig. 6)[213]

Two of the means of knowledge are noteworthy. The first is word, which is the word of an authority, āpta-vacana) considered as valid, but not just because it is a word of a god-given or an eternal scripture (Veda). We have noted earlier that these authorities are defined as free from attribute-strands of constant activity/instability (rajas) and inertia/darkness (tamas) who have uninterrupted flawless knowledge of the three times (past, present and future). [214]

[213] Figure 6, 176

[214] CS. 1. 11. 18- 19.

rajastamobhyāṃ nirmuktāstapojnānabalena ye |
yeṣāṃ trikālamamalaṃ jnanamavyātaṃ sadā ||
āptāh śiṣṭā vibuddhāste teṣāṃ vākyamasaṃśayaṃ |
satyaṃ vakṣyanti te kasmādasatyaṃ nīrajastamāh ||

Mīmāṃsā:

Observation, Inference, Word (of Veda), Comparison, Presumption.

(pratyakṣa) (anumāna) (śabda) (upamāna) (arthāpatti)

Vedānta: **Observation, Inference, Word (of Veda).**

(pratyakṣa) (anumāna) (śabda)

Sāṃkhya: **Observation, Inference, Word (of Veda).**

(pratyakṣa) (anumāna) (śabda)

Yoga: **Observation, Inference, Word (of Veda).**

(pratyakṣa) (anumāna) (śabda)

Nyāya: **Observation, Inference, Word (of Veda).**

(pratyakṣa) (anumāna) (śabda)

Vaiśeṣikā: **Observation, Inference, Word (of Veda).**

(pratyakṣa) (anumāna) (śabda)

Āyurveda:

Observation, Inference, Word (of authority), Practical Reasoning

(pratyakṣa) (anumāna) (āpta-vacana) (yukti)

(Fig. 6)

The second means of knowledge which is noteworthy is 'practical reasoning' (yukti). This is unique to medical science. "Yukti is not counted as a separate pramāṇa by any other system of Indian thought."[215] This is a reasoning process employed when we surmise the growing of crops from a confluence of factors such as water, seeds and plowing. [216] It is through such means that we obtain knowledge of what is true and what is not true.

The treatise of knowledge which was composed by an intelligent pupil of Ātreya, namely Agniveśa, subscribes to a theory of obtaining knowledge through the above-mentioned four means. It is through these means that one comes to know disease and its treatment.

Having accepted the importance of life science, one comes to the physician-patient encounter which is the crux of life science. Life exists in a world that we experience. One looks at the world and sees it made up of various entities. Caraka describes substance (dravya), quality (guṇa), motion (karman), universal (sāmānya), particularity (viśeṣa) and inherence (samavāya) as the six fundamental categories

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[215] Dasgupta, A History of Indian Philosophy, v. 2. p. 375.

[216] CS. 1. 11. 23- 24.
jalakarsaṇabījartusaṃyogāt sasyasaṃbhavah |
yuktih saddhātusaṃyogādgarbhāṇāṃ saṃbhavastathā ||
mathyamanthana manthānasaṃyogādagnisaṃbhavah |
yuktiyuktā catuspādasaṃpadvyādhivarhaṇī ||

that constitute the world as described by the Vaiśeṣika school (and are also, generally speaking, accepted by the Nyāya).[217] In interpreting these categories, Caraka does differ in some respects from the Vaiśeṣika, as Dasgupta points out:

> In the Vaiśeṣika systems the word sāmānya means a class concept; but here it means concrete things which have similar constituents or characteristics; and viśeṣa, which in Vaiśeṣika means ultimate specific properties differentiating one atom from another and in Caraka means concrete things which have dissimilar and opposite constituents or characteristics. Sāmānya and viśeṣa thus have a significance quite different from what they have in the Vaiśeṣika-sūtra. The principle of sāmānya and viśeṣa is the main support of Āyur-veda; for it is the principle which underlies the application of medicines and the course of diets. . . However, in spite of these modifications, the relation of Nyāya-Vaiśeṣika with Caraka seems to be close.[218]

Regarding the first category of the substances (dravya), Caraka states quite early in his treatise that there is a group of nine such

[217] Halbfass, On Being and What There Is, pp. 70 - 71.
[218] Dasgupta, A History of Indian Philosophy, v.2. pp. 371 - 372.

substances: space (ether), wind, fire, water, earth, mind, spirit, time and directional space.[219] For the Nyāya-Vaiśeṣika schools everything that there is, is knowable and nameable, astitvam jñeyatvam abhidheyatvam (literally, '[all] is-ness [is] knowable [and] nameable'). Caraka seems to have adopted a classification of things in the world which is similar, if not identical, to this realism of Nyāya-Vaiśeṣika.

A human being, as a part of this world, can be understood to be comprised of substances (dravyas) as described above. This is in fact one of the views offered: puruṣa, 'person,' meaning an entity comprising space, etc.(air, fire, water, earth) and, the sixth, consciousness. [220] The five substances mentioned can be understood as forming body tissues such as blood, lymph, bones, marrow, flesh, etc. Endowed with a consciousness, such an entity manifests itself in time and place.

So understood, a human being is explainable in the Vaiśeṣika terms of nine substances mentioned earlier. Further, Caraka has defined disease as an imbalance in the dhātu or constituent elements

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[219] CS. 1.1.48.
khādīnyātmā manaḥ kālo diśaśca dravtasaṃgrahaḥ |
sendriyaṃ cetanaṃ dravyaṃ nirindriyamacetanam ||

[220] CS. 4.1.16.
khādayaścetanāṣaṣṭā dhātavaḥ puruṣaḥ smṛtaḥ |
cetanādhāturapyekaḥ smṛtaḥ puruṣasaṃjñakaḥ ||

of the body. Non-equilibrium of the constituent elements (dhātu) is called abnormality or disease and their equilibrium is called the natural state. Health is known as comfort while disease is known as discomfort. [221] And harmful constituent elements of the body, called doṣas, are three in number: wind vāta (wind), pitta (bile) and kapha (phlegm).

The three elements which are called doṣas are always there in the body. It is their imbalance that makes them harmful to an individual. The status of vāta (wind), pitta (bile), kapha (phlegm) in the life-carrying body is innate. The scholar should be inquisitive about their [vata-pitta-kapha's] normal status and their deteriorations. [222]

We have discussed earlier various effects which the imbalance of doṣas can have on the health of a person. We have also noted the correspondence of doṣas to three of the fundamental elements. We should recall that the imbalances of doṣas cause what we would call 'mental' as well as 'physical' changes.[223]

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[221] CS. 1. 9. 4.
vikāro dhātuvaiṣamyaṃ sātmyaṃ prakṛtirucyate |
sukhasaṃjñakamārogyaṃ vikāro duhkhameva ca ||

[222] CS. 1. 18. 48.
nityāh prāṇabhṛtāṃ dehe vatapittakaphāsrayah |
vikṛtāh prakṛtisthā vā tān bubhutseta paṇḍitah ||

[223] CS. 1. 12. 8, 11 - 13. op. cit.

The doṣas in the body have a correspondence to substances or elements in the world, dravyas or mahābhūtas, as follows: vāta (wind) - vāyu (air), pitta (bile) - agni (fire), and kapha (śleṣma, phlegm) - ap (water).

To counteract bodily imbalance, then, one uses certain medicinal substances. These can be divided into three types, depending upon their being harmful or helpful in alleviating an affliction, or whether they help one to maintain health. Substances can be of animal, vegetable or earthen origin. Thus, we have two classifications, each threefold.[224]

All substances--as they become part of an individual when imbibed--are in liquid form and also give rise to different tastes. They also support health and, so, can also be considered the 'juice' of life. All these connotations are implied in the term 'rasa.' It is as rasa (juice/sap/taste) that we come into contact with medicinal substances. The six rasas (juices/saps/tastes) originate from the five gross elements (space, air, fire, water and earth).[225]

[224] CS. 1.1.67 -68.

kṃciddosapraśamanam kiṃcitddhātupradūṣaṇam |
svasthavṛttau matam kiṃcittrividham dravyamucyate ||
tat punastrividham proktam jaṅgamaudbhidapārthivam |
. . . .

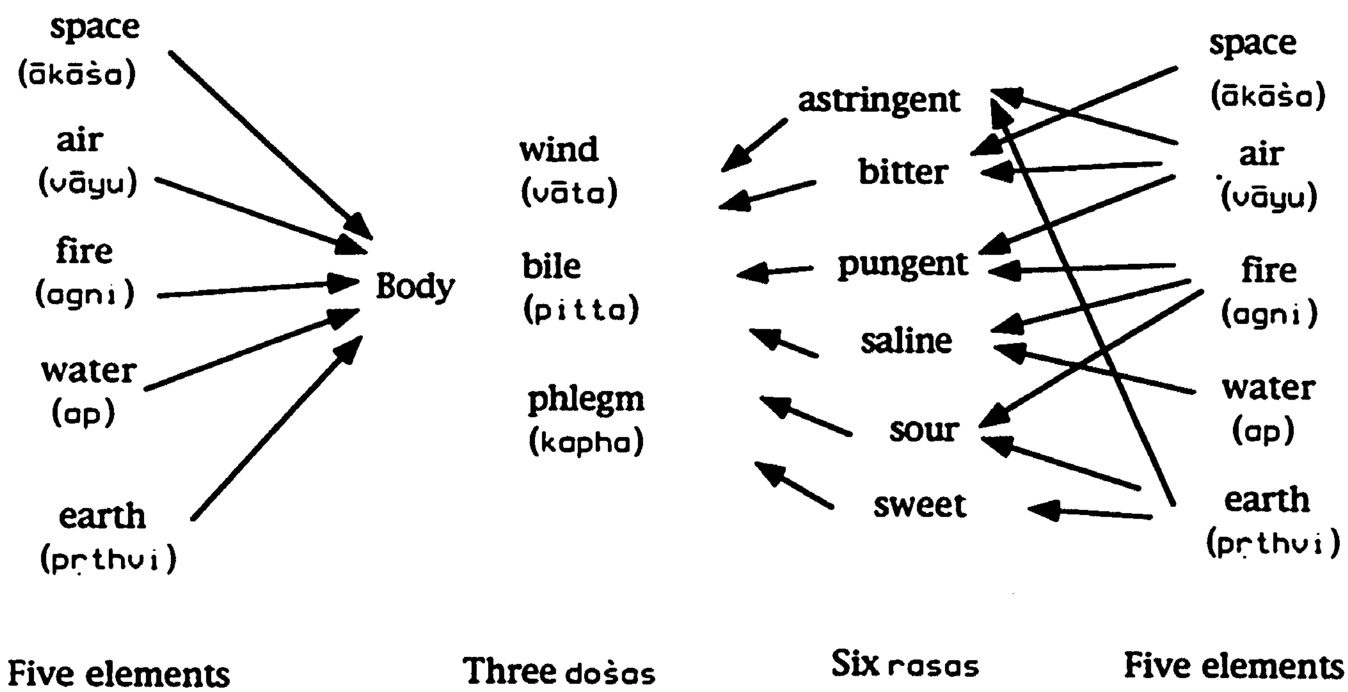
[225] CS. 1.26.38.

sdvibhaktīḥ pravakθsyāmi rasānāmata uttaram |
ṣat pañcabhūtaprabhavāḥ saṃkhyātāśca yathā rasāḥ ||

From a abundance of soma (apa, water) there is sweet rasa, from abundance of earth and fire there is sour from water and fire, saline; from abundance of wind and fire, pungent; from abundance of wind and space, bitter; and from abundance of wind and earth, there is astringent.[226] These rasas influence an individual's health and illness. Pungent, bitter and astringent rasas generate--and sweet, sour, and saline rasas calm--the vāta (wind); pungent, sour, and saline rasas generate--and sweet, bitter, and astringent rasas calm--the pitta (bile); sweet, sour and saline generate and--pungent, bitter and astringent rasas calm--the śleṣma (kapha, phlegm).[227] (Fig. 7) [228]

Such is the structure of health and disease from what we have reviewed thus far. Body, which is made up of five gross elements, is in a state of disease when the three doṣas are in imbalance. These three doṣas correspond to three of the five elements, air, fire and water. Medicinal substances, which like every other material in the world, are also made up of five gross elements, are recognized as rasas (juices/saps/tastes) when they come into contact with the person.

[226] CS. 1. 26. 40.
[227] CS. 3. 1. 6.
[228] Figure 7, p. 183.


space
(ākāśa)
air
(vāyu)
fire
(agni)
water
(ap)
earth
(pṛthvi)
Body
wind
(vāta)
bile
(pitta)
phlegm
(kapha)
astringent
bitter
pungent
saline
sour
sweet
space
(ākāśa)
air
(vāyu)
fire
(agni)
water
(ap)
earth
(pṛthvi)
Five elements
Three doṡas
Six rasas
Five elements

(Fig. 7)

These rasas--ultimately the five elements which make them--aggravate or calm a particular doṣa and, thus, cause or cure an illness.

As explained earlier, if a disease were only a disturbance in vāta (wind), pitta (bile) and kapha (phlegm), then the underlying assumptions of ancient Indian medicine could be said to coincide quite well, not only with the precepts of the Vaiśeṣika school, but also with those of the materialists. In that case, Caraka could even be presented as a thorough-going materialist. Such a view has been advanced by some scholars. To quote one, "Whatever else the metaphysicians may have to say, the physician in his special capacity cannot but be a materialist, because from the medical viewpoint there can be nothing which is not made of matter."[229]

However, Caraka has indicated that there is more to the etiology of disease than a disturbance in vāta (wind), pitta (bile) and kapha (phlegm), notwithstanding the fact that such a disturbance is an important ingredient of such a causality. This becomes clear when we examine the various classifications of diseases offered by Caraka.[230] Diseases are located in both the body and the mind.

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[229] Chattopadhyata, Science and Society in Ancient India, p. 66.
[230] CS. 1.20.3 - 5. op.cit.

Diseases also occur because of changes from within (nija, innate) or from without (āgantu, accidental). The innate diseases are because of an imbalance in the elements, whereas the accidental are because of outside factors such as fire, falls, natural calamities, etc.

Disease can also be classified as curable and incurable. Thus we have a triple classification:

innate, accidental;

corporeal, mental;

curable, incurable.

From these, we get eight principal classes of diseases:

innate, corporeal, curable

innate, corporeal, incurable

innate, mental, curable

innate, mental, incurable

accidental, corporeal, curable

accidental, corporeal, incurable

accidental, mental, curable

accidental, mental, incurable

The various classes of disease are not water-tight compartments. As we have discussed earlier, an accidental disease which starts with pain will affect the three doṣas, and an imbalance

of the three doṣas which initiates an innate disease does lead to pain. From one etiological perspective, both the accidental and innate diseases have a commonality of causative factors: inappropriate alignment of senses and sense objects, error of cognition (judgment) and consequential results (asātmyendriyārthasaṃyogaḥ prajñāparādhaḥ pariṇāmaśceti).[231]

We should note here that the term prajñāparādha is explained as excessive-, non-, or mis-alignment of speech, mind, and body.[232] All three kinds of actions affect both classes of diseases, the accidental and the innate. In other words, all three kinds of abnormal actions cause diseases which can start with pain and later lead to imbalance in humors or start with an imbalance in humors leading eventually to pain. There is no one-to-one exclusivity between a bodily action and an accidental disease. In other words, speech and mental 'acts' could just as well be a cause for an accidental disease.

The other classification of diseases is according to their location, whether they occur in the body or in the mind. Just as a body is said to reach a state of disease when there is an imbalance of three doṣas--vāyu (wind), pitta (bile) and kapha (phlegm)--manas (mind) has rajas (constantly active/unstable) and tamas (inert/dark)

[231] CS. 1. 20. 5. op. cit.
[232] CS. 1.11.41. op. cit.

attributes as a cause of disease.[233] The terms rajas and tamas occur not only in the context of diseases of mind, but are also used in defining a reliable 'authority' (āpta) whose word could be a source of valid knowledge. Such an authority is devoid of the attributes rajas and tamas (rajastamobhyāṃ nirmuktāḥ).[234]

Thus, from considering them as a cause of disease to requiring their absence in a person to qualify as a reliable authority, Caraka has placed the attributes rajas and tamas in a central and essential position in his life science. We may add to this the fact that Caraka has called manas a sattva (manaḥ sattvasaṃjñakaṃ).[235] It is possible that the term sattva, in this context, simply means an 'existent entity.' However, we should recall here that sattva is same term as the first of the three attribute-stuffs of prime matter, along with rajas and tamas. Even the tripod which supports the world is said to be made up of sattva (mind), ātmā (spirit) and śarīra (body).[236]

Suppose we dismiss the talk of spirit, ātmā, as so much 'metaphysical jargon,' still we are left with mind's two unbalanced attributes, rajas and tamas. If we remove the rajas and tamas

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[233] CS. 1.1.57.
vāyuḥ pittam kaphaścoktaḥ śārīro doṣasaṃgrahaḥ |
mānasaḥ punaruddiṣto rajaśca tama eva ca ||

[234] CS. 1.11.18. op.cit.

[235] CS. 1.8.4.

[236] CS. 1.1.46. op.cit.

attributes from Caraka's presentation, we will be left with no etiological explanation of mental diseases and no definition of one of the important (āpta) sources of knowledge. A significant portion of the knowledge of life science and the prime means of such knowledge would have to be removed from Caraka. Moreover, as we have discussed earlier, Caraka considers mental and corporeal, innate and accidental diseases as interconnected in their causation as well as in their manifestation. Discarding the attributes rajas and tamas would leave ancient Indian medicine at best fragmented and at worst meaningless.

Caraka's approach to medicine is anything but fragmented. There is a strong and recurrent theme of interconnections, a sense of wholeness, a thoroughgoing 'holism.' Is there such a principle or world view underlying Caraka' life science itself? If the answer to this question is in the affirmative, then what world view is there that provides a cohesion to Caraka's understanding of medicine?

Such a world view, darśana (lit., view, 'philosophy'), will have to subscribe to the doctrines of karma and rebirth, explain what a human being is and how different diseases occur in human beings. Such a view will also have to explain the interconnections of diseases

as being diverse whether as innate and accidental or as mental and corporeal.

The attributes rajas and tamas provide us a clue pointing in the direction of a world view, darśana, available to us from one of the Indian schools of philosophy, namely Sāṃkhya. There is a strong case for such a proposition in spite of Dasgupta's misgivings in this matter, who states: "But the detailed description of the school of Sāṃkhya. . . does not seem to have much bearing on the needs of Āyur-veda; . . . and it is not referred to in other parts of the book."[237]

If by 'need of Āyur-veda' he means any technical help that rajas and tamas provide in the preparation and administration of medicinal herbs, then, perhaps, a connection between the Sāṃkhya view and āyurveda may not be immediately apparent, although such a relation could be elucidated upon closer examination. However, we do find the terms rajas and tamas used repeatedly by Caraka in many key places. This use is not casual but deliberate and goes to the very heart of our understanding of āyurveda.

Granted, there is another system, Yoga, that has the three attributes (sattva, rajas and tamas) as part of its vocabulary. But it is closely allied to Sāṃkhya. Yoga does subscribe to a formulation of

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[237] Dasgupta, A History of Indian Philosophy, vol.2. p.372.

puruṣa (as 'conscious principle') and prakṛti (as 'primal matter') out of which the material world evolves. However, the purpose and practice of Yoga are to obtain salvation through techniques of meditation. Another important difference between Sāmkhya and Yoga is the fact that the latter is theistic. As Eliade says, "1. Whereas Sāmkhya was atheistic, yoga was theistic, since it postulates the existence of a supreme God (Iśvara). 2. While according to Sāmkhya the only route to salvation is that of metaphysical knowledge, yoga granted considerable importance to the techniques of meditation."[238] The concept of God (the Lord, iśvara) is quite important to the Yoga school, as Feuerstein states, "The ontology of Classical Yoga, or kriyā-yoga, has three major foci, viz. iśvara, puruṣa and prakṛti [the Lord, 'consciousness,' and 'prime matter.']"[239]

The evidence then permits us to focus on the Sāmkya school as a point of reference of āyurveda. If we examine the available text of Caraka, the most extensive treatment of what a 'person' or puruṣa, is to be found in the Śarīrasthāna chapter. We find there twenty-four elements of prakṛti (primal matter) described as constituting a

[238] Eliade, Patanjali and Yoga, p.16.
[239] Feuerstein, The Philosophy of Classical Yoga, p.1.

'person.'[240] An individual being is 'mind,' ten senses (five receptive senses and five active senses), five sense objects, another eight elements of the prime matter (five subtle elements, ego, intellect, and the unmanifest). The five elements of space, air, fire, water and earth are described as gross elements, mahābhūta.[241] (Fig. 2)[242]

The first evolute is buddhi, intellect or reason. Another term for this first evolute is mahat, something great or major, as all other evolutes originate from it. The sattva attribute is the predominant thread in the intellect, though both rajas and tamas are present in a latent state. From intellect is generated ego and from ego, the mind, five perceptive senses, five action senses, and five subtle elements. The intelligence, ego, and mind form antaḥkaraṇa, the inner instrument. It is from the subtle elements that the five gross elements are generated. The subtle elements are called tanmātras, literally 'that-only.' The gross elements, mahābhūtas, literally 'large-things-that-have-become,' are as follows: space, air, fire, water, earth. Everything that we conventionally understand as material

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[240] CS. 4.1.17.
punaśca dhātubhedena caturviṃśatikaḥ smṛtaḥ |
mano daśendriyāṇyarthāḥ prakṛtiścāṣṭadhātukī ||

[241] CS. 4.1.27.
mahābhūtāni khaṃ vāyuragnirāpaḥ kṣitistathā |
śabdaḥ sparśaśca rūpaṃ ca raso gandhaśca tadguṇāḥ ||

[242] Figure 2, p. 87.

things is made of these five gross elements.

Obviously there is a correspondence between the subtle elements and the gross elements. But note also the correspondence between the senses and the subtle as well as the gross elements. It is this correspondence which makes it possible for one to be able to perceive and act.

We have seen that a disturbance or an imbalance in the bodily constituents will lead to disease and that such an imbalance can be counteracted through interacting with substances with opposing qualities. Thus, there is a correlation of five elements which form the body (space, air, fire, water and earth), three of them (air, fire and water) corresponding to the three doṣas, and the same five elements which form the material world (including the medicinal and food substances within it).

If this were all there is to the explanation of illness, then we could be satisfied with a purely material explanation of the disease process. But we have also noted that Caraka quite clearly indicates a category of mental illness and gives rajas and tamas as two attribute-stuffs which are inimical to mental health. These two are to the mind what the three doṣas, namely, vāta, pitta and kapha, are to the body. It is the presence of rajas and tamas which brings

the Sāmkya school into focus in the context of medical science, as these attributes are part of a triad which is central to Sāmkhya. We can recall here that the evolution of different elements starts when there is a disturbance in 'Nature,' 'primal stuff,' prakṛti in the co-presence of puruṣa. "There is no *ex nihilo* creation in the Sāṃkhya, but only a progressive manifestation of already existent but 'hidden' products."[243] This is analogous to the 'evolution' of disease in the body, wherein the three doṣas are not something created anew but are innate, and it is the disturbance among them which causes disease.

Now, we can try to understand this evolution by taking some examples from the world that we experience. Take the example of a human being. In a human being all the evolutes are found to be manifested. There is intellect, ego, mind, all the senses, and subtle and gross elements. The last five gross elements form the body tissues, viz., blood, bones, lymph, etc. From intellect to the gross elements, the predominant attributive thread changes from sattva in intellect and mind to tamas in the gross elements.

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[243] Hulin, Sāmkhya Literature, pp. 144 - 145.

In different evolutes, the attribute-stuffs will be predominant in different proportions. It is important to note that mind is generated from the sattva aspect of 'ego.' Mind on the one hand connects with ego, intellect and spirit, and on the other relates with everything else through the senses. Thus, some people say that mind is 'trans-sensual' (beyond senses), is signified by 'sattva,' is 'consciousness.' Hence, its activity is dependent upon concordance with ātmā. But as an element of the senses, it is independent of actions.[244] The senses, which are connected with mind, are capable of grasping the sense object.

The five senses are: seeing, hearing, smelling, tasting, and touching. The five substances of senses are: space, wind, light, water, and earth. The five locations of senses are: two eyes, two ears, two nostrils, tongue, and skin. The five objects of senses are: sound, touch, shape, taste, and smell.[245] From excessive alignment, from nonalignment, and from misalignment of sense associated with mind,

[244] CS. 1.8.4.
atīndriyaṃ punarmanaḥ satvasaṃjñakaṃ cetaḥ ityāhureke
tadarthātmasaṃpadāyattaceṣṭaṃ ceṣṭāpratyayabhūtamindriyāṇām ||

[245] CS. 1.8.7 - 11.
manaḥpuraḥsarāṇīndriyāṇyarthagrahaṇasamarthāni bhavanti ||
tatra cakṣuḥ śrotraṃ ghrāṇaṃ rasanaṃ sparśanamiti pañcendriyāṇi ||
pañcendriyadravyāṇi khaṃ vāyurjyotirāpo bhūriti ||
pañcendriyādhiṭhānāni akṣiṇī karṇau nāsike jihvā tvak ceti |
pañcendriyārthāḥ śabdasparśarūparasagandhāḥ |

one falls into a state of deterioration (disease), such that buddhi (intellect) is injured. On the other hand, through appropriate alignment, one falls into a natural state such that it restores buddhi (intellect) completely.[246] The object of mind is thinking. Therefore, excessive alignment, non-alignment, and mis-alignment (applicable similarly in cases of both the mind and the cognition) are causes of deterioration (disease) as well as the natural state (health).[247]

Thus it is that sense objects, senses, and the mind should be in appropriate alignment to maintain a balance among them. Only in such a condition will proper cognition take place and appropriate action be performed. If there is an excess of, a lack of, or an error in the conjunction of the three, then a state of disease ensues. A balanced, well-coordinated, karma of mind and senses gives us a state of health. The mind in a healthy state is dominated by the sattva attribute. The sense objects are dominated by the tamas attribute. The rajas attribute is common to any and all activity. Even though

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[246] CS. 1.8.15.
tadarthātiyogāyogamithyāyogāt samanaskamindriyaṃ
vikṛtimāpadyamānaṃ yathāsvaṃ buddhyupaghātāya saṃpadyate
sāmarthyayogāt punaḥ
prakṛtimāpadyamānaṃ yathāsvaṃ buddhimāpyāyayati ||

[247] CS. 1.8.16.
manastuh cintyamarthaḥ |
tatra manaso manobuddhesca ta eva samānātihīnamithyāyogāḥ
prakṛtivikṛtihetavo bhavanti ||

one of the attributes may be prominent in any given evolute of prakṛti or the prime matter, the other two attributes are latent, not absent. Under the circumstances, it is easy to see that an inappropriate conjunction of different evolutes of the prime matter can occur and will adversely influence one another through increasing the potency of their respective attributes.

It may be useful here to offer a few observations about the attributes or guṇas. This rather difficult term has been explained lucidly by Larson:

> The word 'guṇa' in Sanskrit usually means a 'cord,' 'string,' or 'thread.' The term can refer to a 'rope' or the various 'strands' that make up a rope. Moreover, the word can be used in the sense of 'secondary' or 'subordinate,' and in much of Indian philosophical discussion . . . the term is used to refer to the notion of a 'quality' or 'attribute' of a 'substance' (dravya) or thing. The term also comes to be employed in moral discourse, so that 'guṇa' may refer to 'outstanding merit' or 'moral excellence.'
>
> In Sāṃkhya philosophy, however, the term takes on a peculiar technical sense, which combines many of the above meanings but goes much further as well. On one level in

Sāṃkhya, guṇa is a 'cord' or 'thread,' a constituent 'strand' of primordial materiality. On another level, guṇa is 'secondary' or 'subordinate' in the sense that it is secondary to what is primary or principal (pradhāna). On still another level, guṇa implies moral distinction in that it refers to the activity of prakṛti as the basis of satisfaction, frustration, and confusion, or moral excellence, moral decadence, and amoral indifference.[248]

As described in Sāṃkhyakārikā by Īśvarakṛṣṇa,the guṇas interact in the following fashion.

The constituents or constituent processes (guṇa) are experienced as agreeable (prīti), disagreeable (aprīti), and oppressive (viṣāda). Moreover, these constituents have as their pupose illumination (prakāśa), activity (pravṛtti), and restriction (niyama). Finally, with respect to the operation of the constituents, they mutually and successively dominate, support, activate, and interact with one another.

The intelligibility constituent (sattva) is lightweight (laghu) and illuminating (prakāśaka) (that is to say, it

[248] Larson and Bhattacharya, Encyclopedia of Indian Philosophies:Sāṃkhya, pp. 65 - 66.

provides the intellectual clarity and/or the intelligibility of primal, creative nature); the activity constituent (rajas) is stimulating (upaṣṭambhaka) and moving (cala) (that is to say, it provides the capacity for change and/or the continuing process of primal, creative nature); the inertia constituent (tamas) is heavy (guru) and enveloping (varaṇaka) (that is to say, it provides the substance and/or the "thingness" of primal, creative nature). These three, though different in operation and make-up, nevertheless function together for a purpose just as the wick, oil, and flame of a lamp, though different in their makeup, nevertheless function together for the purpose of illumination.[249]

There is, then, a kind of continuity through all diversity. Caraka has mentioned that when an element like 'fire' (agni)--located in the body within 'bile' (pitta)--is aggravated, it not only causes bodily effects such an indigestion but also is responsible for fear, anger, confusion, etc. In other words, a gross element--predominantly tamas--by its own imbalance will cause disturbance in the mind leading to a subduing of sattva in the mind and an

[249] Larson and Bhattacharya, op. cit. p. 154.

enhancing of tamas and rajas. And these (the rajas and tamas) are the two doṣas which cause disease of the mind. Conversely, a disturbance in the mind causing a mental disease will upset the balance of an individual, affecting adversely the balance of vāta (wind), pitta (bile) and kapha (phlegm), all of which are part of tamas.

Hence, there is a sort of apparatus consisting of spirit, mind, senses, and action organs interlocking with the world. The cause of disease, of either the accidental or the innate kind, is an improper alignment of senses, an error of cognition, and subsequent effects. In other words, it is a kind of misfit between an entity--a human being--and the world. Such a misalignment in the gross elements causing an illness will affect the mind too. On the other hand, one will require a balanced state of mind to recognize and correct whatever imbalance has occurred. Therefore, part of the problem in the causation and continuation of disease would be an inability to recognize the presence of such a misalignment. It is such a misreading, or error of cognition, prajṇā aparādha, which is the

fundamental cause of disease.[250]

In the absence of a single formal 'oath' comparable to the Hippocratic Oath in Caraka, we have to examine at several places what is expected of a physician *vis-a-vis* the patient. Some general prescriptions and restrictions are important to note:

One who adopts good conduct, sadvṛtta, achieves both health and control over the senses. Gods, brahmins, teachers, elders, adepts and preceptors should be respected. Oblations should be offered to fire. One should properly cleanse oneself. Thrice a fortnight one should cut one's hair, beard, and nails. One should wear good apparel, use fragrant flowers, and have well arranged hair. One should apply oil to the head, ears, nose and feet, take inhalations, be the first to greet someone, present a pleasant demeanor, help those in distress, offer oblation, perform rites, donate, bow to the four directions at the crossroads, pay respect to an unscheduled guest, give oblation to one's forefathers, enunciate clearly with measured, sweet and meaningful speech, be self-controlled, be virtuous, be eager of karma but not the fruits thereof, be without worry and without fear.

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[250] CS. 1. 20. 5.
dvayostu khalvāgantunijayoḥ preraṇamasātmyendriyārthasaṃyogaḥ prajñāparādhaḥ pariṇāmaśceti ||

The list goes on: be intelligent, have great enthusiasm, be adroit, be forgiving, be dharma abiding, be a believer, attend to preceptors, adepts, elders and nobles with knowledge, intelligence and respect, carry an umbrella, a stick, wear a turban and footwear, walk looking only a four hands-length beyond one's body, be a performer of auspicious activities, avoid exercise prior to tiring exertion, be brotherly to all creatures, be conciliatory to the angry, reassuring to the frightened, kind to the destitute, united with truth, perfectly compassionate, tolerant of the harsh words of others, a destroyer of angry passions, a recognizer of the equanimity of calmness, and a slayer of undue attachments and aversions.

There are also injunctions against certain kinds of behavior. Do not speak untruths. Do not take others' properties. Do not covet others' women. Do not delight in revenge. Do not do evil acts. Do not be evil, even to the evil-doers. Do not talk about others' defects. Do not disclose others' secrets. Caraka even continues on with instructions regarding activities as diverse as walking on uneven slopes of a mountain or entering fast flowing waters ('avoid them') and what to do when yawning ('cover the mouth'), whether to associate with the unvirtuous, adhārmika ('don't').

It is quite possible to collate a list of 'moral' injunctions, similar

to the one offered by Caraka, from numerous 'Law Books' (dharmaśāstras).[251]

Caraka's significant contribution is in positing the 'moral' behavior as an essential part of medical 'science.'

The therapeutic regimen, for Caraka, consists of four parts: the physician, the attendant, medicines, the patient. Note that this whole enterprise is considered a single process. The analogy given is that of 'cooking something' or 'winning a battle.' As in the cooking, we need a vessel, grain, fire and a cook; similarly we need all the four parts of therapy.[252] The absence or inappropriateness of any one of them renders the treatment ineffective.

Excellent familiarity with teachings, observation of (medical) actions performed many times, dexterity and cleanliness are the four qualities of a physician. The medicinal substances should be plentiful, suitable, available and potent enough. The attendant should have knowledge of how to attend a patient along with dexterity, empathy and cleanliness. The patient should have good

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[251] Buhler, The Laws of Manu.

[252] CS. 1.9.11.

paktau hi kāraṇaṃ pakturyathā pātrendhaānalāḥ |
vijeturvijaye bhūmiścamūḥ praharaṇāni ca ||
āturādyāstathā siddhau pādāḥ kāraṇasaṃjñitāḥ |
vaidyasyātaścikitsāyāṃ pradhānaṃ kāraṇaṃ bhiṣak ||

memory, be able to follow instructions, not be unduly afraid, be able to communicate.[253]

We note that, as an integral part of therapy, not only the appropriate qualities of medicinal substances are listed but qualities of patient, attendant and physician are considered very crucial for success of the treatment. All four are interconnected. Mere physical properties of medicinal substances are not emphasized. On the contrary, the principle propounded is that a defect in any one of the four will influence the other three.

We should recall here that all the material objects of the world consist of five gross elements wherein tamas (attribute-stuff) is manifested and rajas and sattva are present though latent. Sattva (attribute-stuff) is normally predominant in the mind, rajas and tamas being defects of the mind. It is the interplay among the three attribute-stuffs that makes the qualities of medicinal substances on the one hand and qualities of the physician, the attendant and the patient on the other, part of a single equation in therapeutic calculus.

If this were all, one could explain the description or injunction for being a good care giver in terms of materiality alone. That is to say, since everything is born of prime matter, things are

[253] CS. 1.9. 5 - 10.

interconnected on account of being parts of a same original 'matter.' But, Caraka, along with the Sāṃkhya school and vedic smṛti texts, recognizes ātmā (spirit, self) as well. The physician should be smṛtimān (endowed with good memory/knowledgeable of authoritative scriptural texts), knowledgeable of causes and (their treatment with) practical reasoning, should be self-controlled (jita-ātmā, lit., victorious over self), ready with knowledge about what needs to be done.[254]

Mere knowledge of medicinal substances does not make one a good physician. Even shepherds, cowherds and forest dwellers may know forms of medicine (herbs). Just knowing the name and form of medicine does not qualify one to be called a physician. Only one who knows the appropriate 'alignment' (yoga, harnessing, joining) of the whole scheme of things, as applicable to different times and places, is called a superior physician.[255]

Caraka states that there are two kinds of physicians: One who fosters life (prāṇa, 'life-breath') and kills disease, and one who leads to disease and kills the patient. Of these two, those who lead one towards life and kill disease are of a noble clan. They have accomplished through audition (śrutāḥ, those who have 'heard' the

[254] CS. 1.2.36.
[255] CS. 1. 1. 120 - 125.

scriptural texts), have observed (medical) actions performed, are dexterous, clean, have mastered (are skillful with) the hands, have conquered the self (ātmā, spirit), are equipped with all the instruments, endowed with all the senses, knowledgeable about normal (healthy) states and about what needs to be done. Having described the knowledge of treatises, of disease and medicine, Caraka reemphasizes the 'moral' qualities of a good physician. The physicians who lead us to life and kill diseases are endowed with friendship and consciousness towards all beings, like a mother, father, brother and other relatives.[256]

Note that not only skilled hands (jitahastā) are a prerequisite for being a good physician. One should also have control over one's self (jitātmā). Further, a friendly compassion toward all beings as if they were one's own kith and kin is essential for being a good physician. Even consideration of these aspects separately and serially is only a matter of convenience for the purposes of discussion. When we remember that a mind (with sattva attribute-stuff predominant) endowed with qualities such as clarity, calmness, memory, etc. is the first and foremost instrument in any good physician's medicine chest, we can appreciate Caraka's integrated

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[256] CS. 1.29.7.

approach. Even in the selection of a physician-teacher, Caraka combines manual skills and knowledge of medicine with qualities such as non-enviousness, lack of anger, ability to calm pain, etc.[257]

Caraka has understood the world as evolutionary from prime matter, prakṛti, through the tripartite process of sattva, rajas and tamas. The key for this understanding is to be found in, among other places, Caraka's interpretation of disease of the mind which is an imbalance of rajas and tamas. Further, the authorities who are sources of knowledge are described as freed from rajas and tamas (that is to say, they operate with sattva in a predominant position). The interconnected nature of different diseases, the influence of the treatment for one kind of disease (mental) on another (corporeal), the characteristics which are considered essential for a good teacher and a good physician such as sattva characteristics: all these illuminate the close interconnection of the Sāṃkhya school of philosophy with the ancient Indian medicine.

It is the inappropriate alignment of sense objects, senses, mind and spirit, that causes various imbalances leading to disease. To correct the disease, then, one has to restore the balance and correct the alignment of various factors. Correct application of only one of

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[257] CS. 3.8.4.

the factors would not be successful. All the four factors, as previously mentioned, should contribute towards this correction for non-, excessive-, or misalignement of acts of mind and body. Caraka's approach is such that once an appropriate treatment is described, simultaneosly and necessarily, the ethical prescription flows from it. This is so, because if there is the presence of greed, anger, envy, and such other ill aspects of the mind in a physician or patient, a teacher or a pupil, the treatment will not be successful. There should be appropriateness throughout the chain from the physician, medicine, and the attendant to the patient.

If the medicinal (or for that matter, food) substances are viewed on a horizontal grid, they would seem to impact an imbalance in the body. On a vertical grid there run the threads of three guṇas, the attributive components of prime matter out of which everything is made. Therefore, a disturbance in any one of the manifestations of these attributive threads will affect the other areas of any created unit, such as a human being. Bodily afflictions are intertwined with mental ones, accidental afflictions are necessarily connected with the innate, and all of the afflictions are associated with their corresponding therapeutic measures. A disturbance that can cause imbalance in a person can occur through any of several possible

points of contact between the world and one's instruments of sense and action. Absent, excessive, or abnormal alignment of senses and mind with their objects are the causes of disease. The treatment is to correct the misaligment of various factors that make up a person as part of the world.

One needs all of one's faculties to perform the strictly prescribed rituals of Veda. A 'healthy person' is a prerequisite to dharma. If all the elements of one's being are in proper alignment, one is healthy and is better equipped to experience sensual joys and acquire material wealth, that is to say, satisfy desires of artha and kāma. Understanding of medical science informs us of detachment of 'pure consciousness' from the miseries of the material world. This is liberation, mokṣa. Thus, all four human endeavors are rooted in the āyurveda.[258]

Accompanying all materiality, prakṛti, there is 'pure consciousness,' puruṣa. We may recall that Caraka has considered three entities as forming one structure, the tripod of sattva (mind), ātmā (spirit), and śarīra (body). The world endures from them and therein rests everything. Further, such a stucture is a human being (pumāṃs), consciousness (cetanaṃ), and that is the received subject

[258] CS. 1. 1. 15. op. cit.

matter (adhikaraṇa) of the Veda, which is brought to light.[259] The presence of 'spirit' is very important in the analysis of world structure. It is for the sake of spirit (puruṣārtha) that material entities (prakṛti) operate. Without the presence of 'pure consciousness' ('spirit,' puruṣa, ātmā), allocation of karma and its fruits to the responsible agent of karma is not possible.

Spirit is an integral part of the world understood as a tripod, along with mind and body. The mind in its balanced state (with sattva predominant) can influence and be influenced by senses and, through the senses, by all other entities in the world. This would include, among other things, other human beings. For the patient it would include physicians, attendants, relatives, friends, etc. For the physician, it would include patients, teachers, pupils and other folks. In every encounter, either with another human being or a medicinal herb, one is well advised to make sure that such an encounter fulfills one's requirement to maintain the balance.

Thus, at first glance what appears to be a scheme for understanding the etiology and treatment of disease (three doṣas

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[259] CS. 1.1.46 -47.
sattvamātmā śarīraṃ ca trayametattridaṇḍavat |
lokastiṣṭhati saṃyogāttatra sarvaṃ pratiṣṭhitam ||
sa pumāṃścetanaṃ tacca taccādhikaraṇaṃ smṛtam |
vedasyāsya tadarthaṃ hi vedo'yaṃ samprakāśitaḥ ||

for the body and rajas and tamas for the mind) interlocks with the whole world in a mutually dependent structure. Any disturbance in one will affect--for better or for worse--whoever is in proximity. Since without ātmā (spirit, self) the materiality is unaware of itself, any meaningful treatment would necessarily include an understanding of ātmā. On the other hand, ātmā (spirit) experiences the world in affiliation with mind and body.

Caraka does not endorse a view that everthing is One, Single, Unitary Ātmā. Individuals in the world are as so many ātmās associated with mind and body, and each is responsible for his/her actions. Through timely and appropriate intervention, one maintains health and cures disease. The prescription that leads to health is the same one that prompts one to perform ethical behavior.

Correlatively, injunctions for ethical behavior read like therapeutic prescriptions. There is no special edict from God or the gods for the physician to act ethically. A good physician needs to be healthy and knowledgeable in order to be able to treat his patients. This requires that his mind be pure and free from domination by rajas and tamas. Otherwise it would not be possible for him to obtain or retain knowledge. But since, for Caraka, maintenance of a balance among the elements of mind and body is an integrated

activity, it behooves the physician to achieve his own bodily health as well.

The physician also should be knowledgeable of 'spirit.' Ethics for a physician, then, is an essential part of good treatment. Both the treatment and the ethics are born of a view wherein the world is seen as having evolved from the prime matter in the presence of 'pure consciousness.' Caraka offers us a doṣa-based theory of disease related to the Saṃkhya-based philosophy and an ethics which is an integral part of both medicine and philosophy. Thus, Caraka's medical science is 'holistic' in the most radical sense as it encompasses medicine, ethics and philosophy within a single domain.

(8)

Conclusion

It is instructive that the current debate over heath care reform is mainly, if not exclusively, a debate about the 'cost' and 'management' of health care. The success or failure of efforts to improve health care is defined in terms of 'cost.'[260] But the answer to the problems in which we find ourselves will depend on the questions that we ask. Philosophy teaches us, among other things, how to formulate questions that are as lucid and as explicit as possible. One writer traces the failure of the Clinton health reform plan to the use of unclear and inappropriate metaphors. "The military metaphor (undercut by such words as 'savings' and 'choice') simply could not provide a coherent vision of the Clinton plan. Nor could the market metaphor."[261] We need to expand and reexamine the parameters and terms of debate in health care reform. Before attempting to alter the system of health care delivery, it may be useful to learn about an alternate 'view' (darśana) of health such as Āyurveda offers.

[260] Goldberg et. al. The Relation between Universal Health Insurance and Cost Control, N Engl J Med, 332:11, pp.742 - 744.

[261] Annas, Reframing the Debate on Health Care Reform by Replacing Our Metaphors, N Engl J Med, 332:11,p.746.

If by science we mean a system which possesses clearly defined parameters, knowledge and modalities of its verification, and which also provides us with an understanding of nature that enables us to deal with it in a predictable fashion, then Caraka-Saṃhitā can qualify for the title of a scientific treatise. If philosophy is an attempt to articulate and examine our thoughts and beliefs in a most penetrating way, then Caraka undoubtedly contains several sections which can easily pass the test of being part of a philosophical discourse. Add to this many sections which are ethics-oriented and we can safely say that among the various extant medical treatises from various ancient cultures, Caraka-Saṃhitā can be placed in a prominent position.

Perhaps more important is the fact that āyurveda is not a 'dead' science, a museum piece to be admired as a specimen kept under a cloak of scholarship. It has been practiced continuously since its formulation in the distant past, although, as time passed, some changes in its theory and practice undoubtedly have occurred. However, the core concepts, such as the doṣas as a cause of disease, the integrated approach to diseases of the mind and body, the acknowledging of 'spirit,' ātmā, as part of an individual's make-up, and the responsibility for one's karma have remained constant.

Medical science as interpreted by Caraka can have several lessons for us. In the Caraka scheme of things, medications such as antibiotics or analgesics are only one of the four parts of a good therapy, the others being the physician, the attendant and the patient. Administering a medication most appropriate for a given disease (for example, penicillin for a 'strep throat') does not mean a complete treatment for that disease as Caraka would interpret it. The 'thoughts' and 'moods' of a physician, attendant or patient will also help or hinder the proper treatment of disease. A physician's 'greed' or an attendant's 'anger' would be bad for the patient, not just because these types of attitudes are 'bad manners,' but because they themselves are karmas with their potential 'fruits.' Caraka's injunctions to all the participants in the healing enterprise are much more profound than mere tinkering with bedside etiquette. This is not a 'feel-good' kind of advice. 'Greed' and 'anger,' whether they are present in the physician or an attendant or a patient, upset the balance of elements (vāta, pitta and kapha in the body, and rajas and tamas in the mind) in the patient as well as the physician and the attendent.

Further, all diseases originate as a result of an absence of alignment (a-yoga), an excessive alignment (ati-yoga) or a

misalignment (mithyā-yoga) of mind, senses and sense objects. This is one of the reasons why a physician who has qualities which are reflective of sattva guṇa can help a patient--with whom the physician comes into contact-- to achieve a balanced state. The cultivation of qualities such as mental equanimity and clarity or the lack of envy and greed is not only good morality but also good medicine.

To say that modern medicine has made great strides in technical and pharmaceutical therapy may be controverted but cannot be dismissed completely. Even if we accept that a percentage of the reduction in morbidity and mortality in the past century was more related to improved hygiene than to medical progress, we can say that at least in some cases (for example, in diabetes or polio) modern medicine has made a big difference. However, from Caraka's perspective all these advances, no matter how great, are an elaboration of only one of the four legs of treatment, and at times at the expense of the other three.

People often watch violent scenes and speeches on a TV screen. Violence and anger are signs of a disturbed mind. Harnessing or aligning one's visual and auditory senses, along with one's mind, to such 'emotions' is *prima facie* harmful as far as Caraka is concerned.

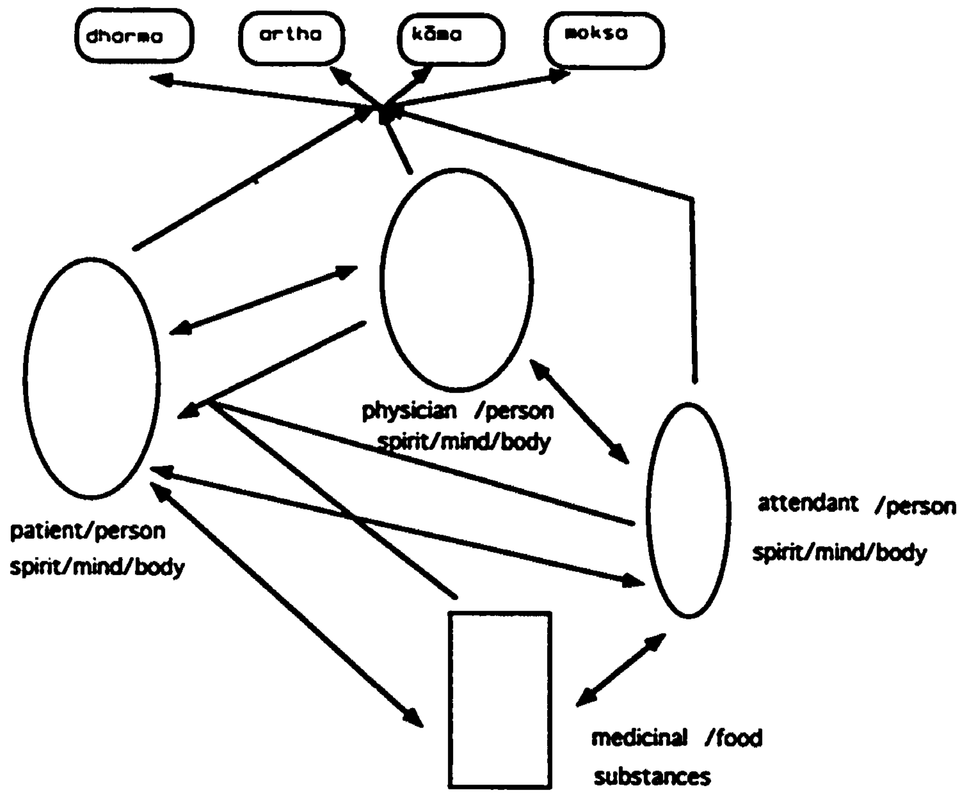
From the āyurvedic point of view, no studies are required to 'prove' such a conclusion. The mind, the senses, and the action apparatus have their designated and appropriate purposes. Any mismatching or overutilization or distorted employment of any of these senses will lead to disease. Of course, in a given instance, the degree of damage caused by anger, envy, loud noise, a sedentary lifestyle, an example of 'non-alignment,' is a matter to be measured through 'life science.'

There is also a case to be made for everyone's individual responsibility. One must accept the fruits of one's actions, but one need not be fatalistic. Through appropriate counteractions one can correct an imbalance inherited from an earlier time. There is community responsibility, too. As Caraka has mentioned, when people get angry and violent they resort to arms and either kill each other or invite outsiders' attacks.

Thus, Caraka gives us a system that is medically consistent and ethically responsible. Though Caraka's list of medications and medical procedures may appear to be narrow by present standards, its philosophical framework is vast and sturdy enough to accommodate easily most of the modern therapeutic interventions. Āyurveda defines 'health science' as 'life science' and 'life' as a

conjunction of mind, body, and 'spirit'--which is influenced by one's *karma* and improved by one's reflective intelligence (*prajñā*)---and thus provides us with an expanded horizon. Perhaps within this openness we will be able to find new avenues of solutions to contemporary problems, philosophical as well as medical. (Fig. 8)[262]

[262] Figure 8. p. 218.


dharma
artha
kāma
moksa
physician /person
spirit/mind/body
patient/person
spirit/mind/body
attendant /person
spirit/mind/body
medicinal /food
substances

(FIG. 8)

Appendix

1. The aim of āyurveda: Long life.

CS. 1. 1. 1.

athāto dīrghaṁjīvitīyamadhyāyaṃ vyākhyāsyāmaḥ ||

Now we shall expain the chapter about long life.

2. Āyurveda: Life-Science (Knowledge)

CS. 1. 1. 41.

hitātitam sukhaṃ duḥkhamāyustasya hitāhitam |

mānaṃ ca tacca yatroktamāyurvedaḥ sa ucyate ||

As āyurveda we speak of life: fit, unfit; pleasant, unpleasant;

measurement thereof: fitting, misfitting;

and its expression.

3. Āyuḥ: Life.

1. 1. 42.

śarīreindriyasattvātmasaṃyogo dhāri jīvitam |

nityagaścānubandhaśca paryāyairāyurucyate ||

[Entity resulting] from conjunction of body, senses, mind, and spirit (self, soul), the sustaining entity, the living entity, the constantly ongoing entity, sequentially connecting entity, in turn are called āyuḥ.

4. Illness, Health, and their Interconnectedness:

1. 9. 4.

vikāro dhātuvaiṣamyaṃ sātmyaṃ prakṛtirucyate |

sukhasaṃjñakamārogyaṃ vikāro duḥkhameva ca ||

Non-equilibrium of the constituent elements (dhātu) is called deterioration (disease) and [their] equilibrium is called natural state. And health is known as comfort/happiness and disease as discomfort/misery.

1. 1. 54.

kālabuddhīndriyārthānāṃ yogo mithyā na cāti ca |

dvayāśrayāṇāṃ vyādhīnāṃ trividho hetusaṃgrahaḥ ||

Of the diseases located in two places, the collection of causes is three-fold: an adverse, absent, or excessive conjunction of what is denoted by kāla (time), buddhi (intellect), and indriya (sense).

1. 1. 55.

śarīraṃ satvasaṃjnaṃ ca vyādhīnāmāśrayo mataḥ |

tathā sukhānāṃ yogastu sukhānāṃ kāraṇaṃ samaḥ ||

Accepted location of diseases is the body and the mind. Thus, joining the state of comforts/happiness is on par with activity (that causes) the state of comforts/happiness.

1. 1. 57.

vāyuḥ pittam kaphaścoktam śārīro doṣasaṃgrahaḥ |
mānasaḥ punaruddiṣṭo rajaśca tama eva ca ||

The group of body-doṣas (defects/ill humours) are said to be vāyu (wind), pitta (bile), and kapha (phlegm). However, rajas (active attribute-stuff) and tamas (innert/dark attribute-stuff) are indicated as [the doṣas of] mind.

1. 18. 48.

nityāḥ prāṇabhṛtāṃ dehe vatapittakaphāśrayaḥ |
vikṛtāḥ prakṛtisthā vā tān bubhutseta paṇḍitaḥ ||

The location [state] vāta (wind), pitta (bile), kapha (phlegm) in the life-carrying body is innate. The scholar should be inquisitive about their [vata-pitta-kapha's] normal status and deteriorations.

1. 20. 3.

caturvāro rogā bhavanti āgantuvātapittaśleṣmaninimittāh

teṣāṃ caturṇāmapi rogāṇāṃ rogatvamekavidhaṃ bhavati

ruksāmyānyāt

dvividhā punah prakṛtireṣāṃ āgantunijavibhāgāt

dvividhaṃ ca eṣāmadhiṣṭhānaṃ manahśarīraviśeṣāt

vikārāh punar aparisaṃkhyeyāh

prakṛityadhiṣthānaliṅgāyatanavikalpaviśeṣaparisaṃkhyeyatvāt ||

Four kinds of diseases occur: [one is caused by] accident, [and three others are innate:] vāta (wind), pitta (bile), śleṣmaṇa (phlegm).

Even among all the four diseases there is a single *illness* due to the commonality of pain.

However, their natural state is twofold due to distinction of accident and innateness.

Their location is also twofold due to [particular] difference of mind and body.

Of course, the deteriorations are innumerable, due to numerable natures, locations, characteristics, origins, varieties, and particularities (specifics).

1. 20. 5.

dvayostu khalvāgantunijayoh preraṇamasātmyendriyārthasaṃyogah prajñāparādhah pariṇāmaśceti ||

The cause of both, accidental and innate [conditions], is : improper conjunction of what is indicated by senses, error of cognition, and subsequent development.

1. 20. 6.

sarve'pi tu khalvete'bhipravṛddhāh catvāro rogāh parasparamanubandhanti

na ca anyonyena saha sandehamāpadyante ||

All four diseases, when advanced, are interconnected to each other;

yet they do not allow confusion with one another.

1. 20. 7.

āganturhi vyathāpūrvaṃ samutpanno jaghanyaṃ vātapittaślesmaṇāṃ vaiṣamyamāpādayati

nije tu vātapittaśleṣmāṇah pūrvaṃ vaiśamyamāpadyante jaghanyaṃ vyathāamabhinirvartayanti ||

The accidental disease, having started first with pain, later proceeds to the imbalance of vāta (wind), pitta (bile), śleṣmaṇa (phlegm).

On the other hand, the innate [diseases] first affect the imbalance of vāta (wind), pitta (bile), ślesmaṇa (phlegm) and later develop into painful condition.

1. 11. 41.

iti trividhavikalpam trividhameva karma prajnāparādha iti vyavasyet||

Thus three kinds of actions [karma of mind, speech and body] and their three categories [excessive--, non-, and wrong-alimgnent (yoga)] constitute the error of cognition.

1. 7. 51 - 52.

ye bhūtavisavāyvagnisamprahārādisambhavā |
nṛṇāmāgantavo rogāḥ prajñā teṣvaparādhyati ||
irṣyāśokabhayakrodhamānadveṣādayaśca ye |
manovikārāste'pyuktāh sarve prajnāparādhajāh ||

Accidental diseases affecting persons occurring due to evil spirits, poison, wind, fire, assault, etc., therein is an error of cognition.

Envy, sadness, fear, anger, vanity, and hatred etc., are the deviations of manas (the mind), these are all called errors of cognition.

4. 4. 34.

tatra trayaḥ śarīradoṣā vātapittaśleṣmāṇaḥ

te śarīraṃ dūṣyanti

dvau punaḥ satvadoṣau rajastamaśca

tau satvaṃ dūṣyayaḥ |

tābhyāṃ ca satvaśarīrābhyāṃ duṣṭābhyāṃ vikṛtirupajāyate

nopajāyate cāpraduṣṭābhyāṃ ||

There are three doṣas of the body: vāta, pitta and kapha. They spoil the body. Further, there are two doṣas of the mind: rajas and tamas. These two spoil the mind. Because of the spoiling of mind and body a disease is produced. And it is not produced if there is no spoiling.

4. 4. 36.

. . .

śarīraṃ hyapi satvamanuvidhīyate satvaṃ ca śarīraṃ | . . .

The body follows the mind, and the mind [follows] the body.

5. Karma (and its relation to health and disease).

2. 7. 19 - 20.

naiva devāḥ na gandharvā na piśācā na rākṣasāḥ |

na cānye svayamakliṣṭamupakliśnanti mānavam ||

ye tvenamanuvartante kliśyamānam svakarmaṇā |

na sa taddhetukah kleśo na hyasti kṛtakṛtyatā ||

Neither deva (gods), nor gandharva (celestial singers), nor piśācā (fiends), nor rākṣasāḥ (demons), nor any others torment a person who is himself untormented.

They (deva etc.) follow the one who is tormented due to his own karma (act).

Neither It is not the disease causing it nor is it *fait accompli.*

1. 11. 37 - 39.

trayo upasthambhā iti āhārah svapno brahmacaryamiti . . .

trividhim balamiti sahajam kālajam yuktikṛtam ca | . . .

trīṇyāyatanānīti arthānām karmaṇah kālasya ca

atiyogāyogamithyāyogāh| . . .

karma vāṅgmanahśarīrapravṛtih | . . .

The three supports [of life] are food, sleep and ascetic (with abstinence) way of life (brahmacarya).

The three strengths [of life] are innate, and those which result from passage of time as well as from use of practical reasoning.

The three locations [of origin of diseases] are excessive, absence and wrongful aligning of the objects of senses, of one's actions, and of time.

Karma (action) is activity of speech, the mind and the body.

1. 11. 40.

saṃgrahena ca atiyogāyogavarjam karmam vāṅgmanahśarīrajamahitamanupadiṣṭam yattacca mithyāyogaṃ vidyāt||

In summation, excessive alignment and nonalignment of activities--which are harmful--of speech, the mind, and the body are to be known as wrong alignment.

1. 11. 41.

iti trividhavikalpaṃ trividhameva karma prajnāparādha iti vyavasyet||

Thus three kinds of actions [of mind, speech and body] and their three categories [excessive--, non-, and wrong-alignment] constitute the error of cognition.

4. 1. 102.

dhīdhṛtismṛtivibhraṣṭaḥ karma yat kurute'śubham |

prajñāparādhaṃ taṃ vidyāt sarvadoṣaprakopaṇam ||

When one--whose intelligence, patience, and memory has been dissipated--does dark deeds (aśubha karma), that is known as error of cognition causing aggravation of all doṣas.

4. 1. 116.

nirdiṣṭaṃ daivaśabdena karma yat paurvadehikam |

hetustadapi kālena rogāṇāmupalabhyate ||

By the word 'daiva,' karma done in a prior embodied-life is indicated. Because of that, with (the passage of) time, diseases occur.

5. Qualification of an 'authority,' 'āpta':

1. 11. 17.

dvividhameva khalu sarvaṃ saccāsacca | tasya caturvidhā parikṣā āptopadeśaḥ pratyakṣaṃ anumānaṃ yuktiśceti ||

Everything is indeed either true (real) or not-true (not-real). Their examination is done four ways: instruction from authority, observation/perception, inference, and practical reasoning.

1. 11. 18 - 19.

rajastamobhyāṃ nirmuktāstapojnānabalena ye |

yeṣāṃ trikālamamalaṃ jnanamavyātaṃ sadā ||

āptāḥ śiṣṭā vibuddhāste teṣāṃ vākyamasaṃśayaṃ |
satyaṃ vakṣyanti te kasmādasatyaṃ nīrajastamāḥ ||

Those who are free from rajas [constantly active attribute-stuff] and tamas [dark/inert attribute-stuff] and who have uninterrupted flawless knowledge of the three times [past, present, and future] are the authority civil and knowledgable. And their words are beyond doubt. They, who are devoid of rajas] and tamas speak truth. How can they [speak] untruth?

6. Person.

1.1.46.

sattvamātmā śarīram ca trayametattridaṇḍavat |
lokastiṣṭhati samyogāttatra sarvam pratiṣṭhitam ||

sattva (mind), ātmā (spirit), and śarīra (body) is like a tripod.

The world endures from them. Therein rests everything.

1.1.47.

sa pumāṃścetanam tacca taccādhikaraṇam smṛtam |
vedasyāsya tadartham hi vedo'yam samprakāśitaḥ ||

Such is the human being (pumāṃs), and that is consciousness (cetanaṃ), and that is the received subject matter (adhikaraṇa) of the Veda. This Veda is brought forth to light.

1.8.4

atīndriyaṃ punrmanaḥ satvasaṃjñakaṃ cetaḥ ityāhureke
tadarthātmasampadāyattaceṣṭaṃ ceṣṭāpratyayabhūtamindriyāṇām ||

However, some people say that mind is 'trans-sensual' [beyond senses], is signified 'sattva', is 'consciousness'. Hence, it is an activity idependent upon concordance with ātmā. [But as] an element of senses, it is not dependent of actions.

4. 1. 17.

punaśca dhātubhedena caturviṃśatikaḥ smṛtaḥ |
mano daśendriyāṇyarthāḥ prakṛtiścāṣṭadhātukī ||

However, from the analysis of elements, [puruṣa] is thought to be (according to smṛti texts) twenty-four: mind, ten senses, five objects of senses, and prakṛti with its eight elements (avyakta, mahat/buddhi, ahaṃkāra, five subtle elements).

4. 1. 63 - 64.

khādīni buddhiravyaktamahaṅkārastathā'ṣṭamaḥ |

bhūtaprakṛtiruddiṣṭā vikārāścaiva ṣoḍaśa ||

bhuddhindriyāṇi pañcaiva pañca karmendriyāṇi ca |

samanaskāsca pañcārthā vikārā iti saṃjñitāḥ ||

Space etc. (air, fire, water, earth), intellect, unmanifested enitity, and ego are the eight 'beings' of prakṛti, and the 'evolutes' are sixteen. Five cognitive senses, five action senses, mind, and five sense objects are indicated as 'evolutes.'

[Cf. Sāṃkhya kārikā: (Davies, John, The Sankhy karika of Iswara Krishna).

mūlaprakṛtiravikṛtirmahadādyāḥ prakṛtivikṛtayaḥ sapta |

sodaśadakastu vikāro na prakṛtirna vikṛtiḥ puruṣaḥ ||3

prakṛtermahāṃstato'haṃkārastasmād gaṇaśca ṣoḍaśakaḥ |

tasmādapi ṣoḍaśakātpañcabhyaḥ pañca bhūtāni ||22

'Nature (Prakṛti), the root (of material forms), is not produced. The Great One (Mahat=Buddhi or Intellect) and the rest (which springs from it) are seven substances, producing and produced. Sixteen are productions (only). Soul is neither producing nor produced.'

Matter in its primal form (Prakṛti) is external and self-existing. From it all things emanate, except Soul, which has

an independent existence, and is eternal, both a *part ante* and a *parte post* .

From Prakriti proceed: (1) Intellect (Mahat or Buddhi), the substance or essence by which the soul obtains a knowledge of external things. . .

From Intellect (*Buddhi*) proceeds Cosciousnss or Egoism (*Ahankara*). . .

From Ahankara or Consciousness proceed the five subtle elements (*tanmatra*) which are the primary forms or essences of gross material things, i.e., of all formal life. . .

From these five primary essences proceed the five gross elements (*mahabhutas*). . .

From Cosciousness [Ahankara] proceed also the five organs of sense. . . and the five organs of actions. . .

Lastly, it produces the manas, which is the receptive and discriminative faculty. It receives and individualises the impressions made by outward objects on the senses.]

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